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Current Economic Analysis F-9

U.S. Department of Commerce

National Oceanic and Atmospheric Administration

National Marine Fisheries Service

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FOOD FISH

SITUATION AND OUTLOOK

ANNUAL REVIEW 1970

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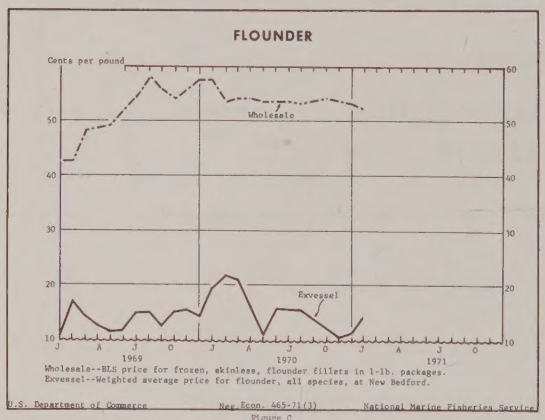
MONTHLY EXVESSEL AND WHOLESALE PRICES OF MAJOR GROUNDFISH SPECIES



Wholesale--BLS price for frozen, skinless, flounder fillets in 1-lb. packages.
Exvessel--Weighted average price for flounder, all species, at New Bedford.

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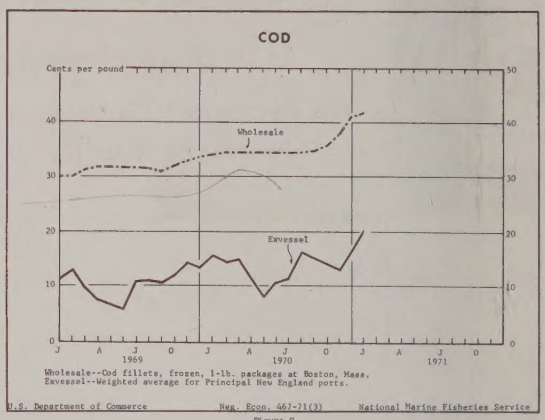
Figure C



Wholesale--Cod fillets, frozen, 1-lb. packages at Boston, Mass.
Exvessel--Weighted average for Principal New England ports.

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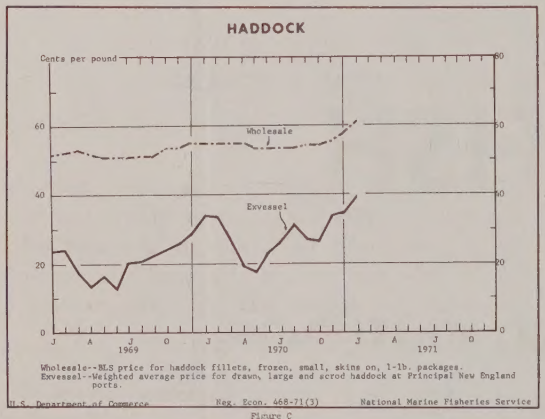
Figure C



Wholesale--BLS price for haddock fillets, frozen, small, skins on, 1-lb. packages.
Exvessel--Weighted average price for drawn, large and scrod haddock at Principal New England ports.

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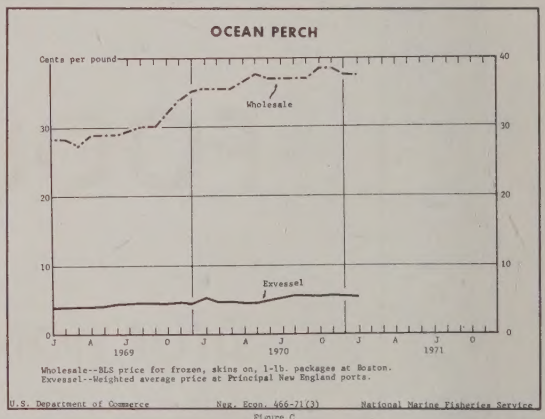
Figure C



Wholesale--BLS price for frozen, skins on, 1-lb. packages at Boston.
Exvessel--Weighted average price at Principal New England ports.

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Figure C

LANDINGS AND VALUE OF GROUNDFISH

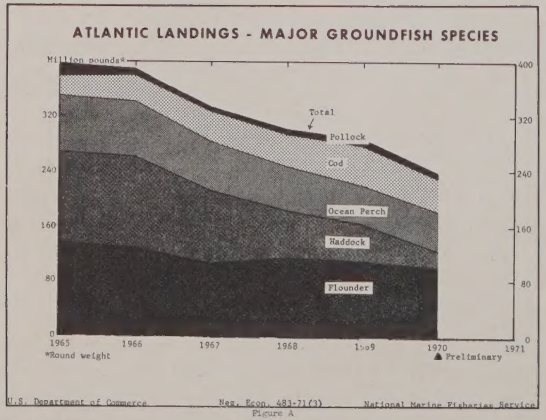

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Figure A

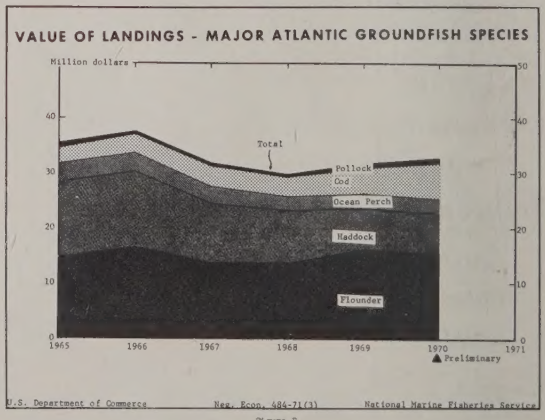

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Figure B

FOOD FISH SITUATION AND OUTLOOK

Approved by the

National Marine Fisheries
Service Situation
and
Outlook Board

March 18, 1971

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CONTENTS

	Page
Summary	3
Review and outlook	7
Fish blocks	7
Fish sticks and portions	10
Flounder	13
Cod	17
Haddock	21
Pollock	24
Ocean perch	26
Halibut	29
Whiting	31
Salmon	34
Tuna	41
Sardines	47
List of tables	50

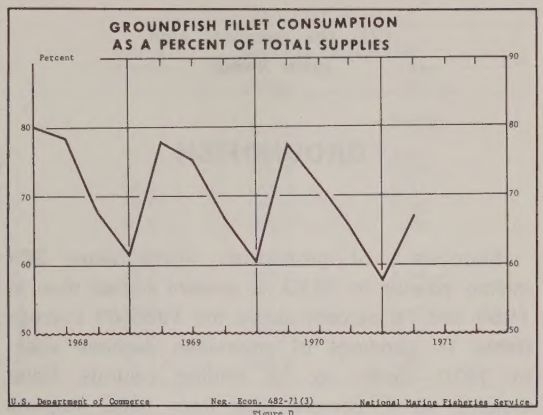


Figure D

SUMMARY

FISH BLOCKS, STICKS AND PORTIONS

Supplies of blocks, sticks and portions increased in 1970, but the rate of increase was not so great as in 1969. Imports of blocks were high in the first half of the year but dropped sharply in the second half as inventories were depleted in exporting countries.

The shortage of blocks, especially cod blocks, caused prices for all blocks to rise, reaching record levels in December. As prices rose, U.S. inventories fell to 30.7 million pounds at the end of the year.

Production of sticks and protions in 1970 increased 6 percent over 1969, but in the fourth quarter production was less than fourth quarter 1969.

The higher prices of blocks forced a rise in the prices of sticks and portions, which reached record highs at the close of 1970. Accompanying the high prices was a decrease in disappearance of blocks, sticks and portions in the second half of 1970, compared to the first half.

Two principal conditions will greatly influence the quantity of block imports and production and sales of sticks and portions in 1971. The are:

(1) the worldwide shortage of supplies of blocks and,

(2) the resultant high price levels.

GROUNDFISH

Supplies of groundfish fillets were 384 million pounds in 1970, 9 percent higher than in 1969 and 18 percent above the 1965-69 average (table 1). Landings of groundfish declined again in 1970—down to 92 million pounds (fillet weight), an 11-percent drop from 1969. Imports continued to make greater inroads into U.S. markets—their 18-percent increase in 1970 to 245 million pounds accounted for most of the increase in supplies.

In the past 2 years, a discernible pattern of events has affected most of the groundfish species. In 1969, and especially 1970, when prices in the economy became increasingly inflationary, wholesale prices of groundfish fillets in the United States also rose, reflecting increasing costs of operation. High wholesale prices for fillets attracted heavier quantities of imported fillets—notably cod, flounders, and haddock. Imported products have been able to compete with the domestic product quite effectively because of lower production costs, and because imports were considered by the U.S. distributor as a more stable source. An important reason for this stability was that supplies shipped from several nations spread the risk of declining fisheries.

When a larger proportion of the world production of fillets was shipped to the United States in 1969 and 1970, a greater strain was placed on world supplies. Greater fishing effort by exporting countries, along with rising costs made these countries more dependent on high wholesale prices, such as those in the United States.

Toward the end of 1970, wholesale prices began to level off as the economy cooled somewhat. The combination of scarcer supplies of some species *(i.e., cod and haddock)* and higher fillet prices, compared to other food items accounted for a slowdown in consumption (figs. 1 and 2).

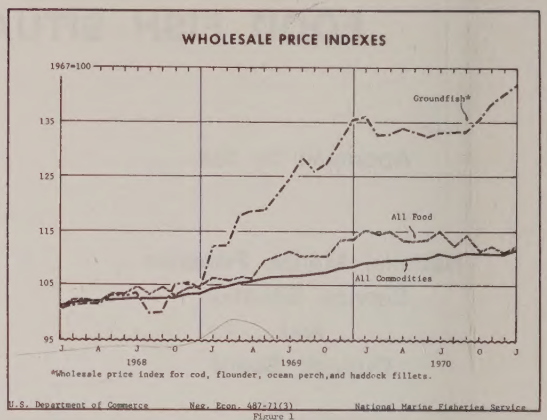


Figure 1

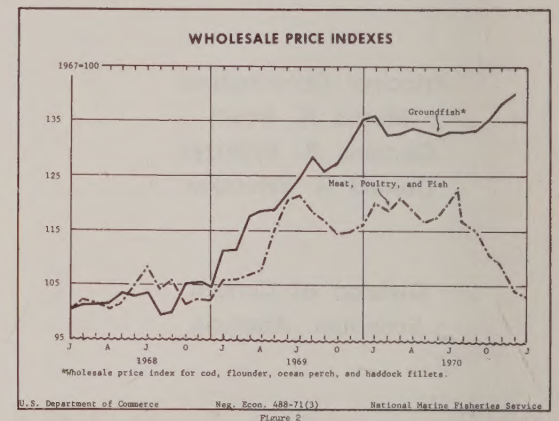


Figure 2

Although the demand for cod fillets has been bolstered by the rapid growth of fish and chip outlets in 1970, scarce supplies and higher prices very possibly may cause buyers to resort to substitute species at lower prices in 1971. However, not all of the potential demand for cod fillets will be satisfied by substitutes, especially in the institutional market.

In 1971, world supplies of cod fillets, and possibly pollock, may be increasingly diverted to markets other than the United States. The United Kingdom and European Economic Community countries are likely prospects because of rising prices in those countries.

The rise in wholesale prices of fillets in 1970 did not prevent consumption from reaching 333 million pounds, 9 percent above 1969. Cod fillet consumption was constrained chiefly by

Table 1.-- Supplies and utilization of major groundfish 1/, 1960-70

(fillet weight)

Year	Supplies				Utilization		
	Beginning stocks	Landings	Imports of fillets	Total	Ending stocks	Apparent consumption	
						Total	Per capita
	Million pounds						Pounds
1960	46.9	153.3	84.6	284.7	38.4	246.4	1.37
1961	38.4	159.8	94.9	293.1	37.9	255.3	1.39
1962	37.9	165.1	96.4	299.1	35.8	263.5	1.41
1963	35.8	164.8	95.1	295.6	39.0	256.6	1.36
1964	39.0	160.1	101.3	300.4	38.8	261.7	1.36
1965	38.8	161.9	104.2	304.8	33.2	271.7	1.40
1966	33.2	155.3	143.2	331.8	49.7	282.1	1.44
1967	49.7	133.7	127.4	310.9	43.0	267.9	1.35
1968	43.0	120.4	168.6	332.0	40.9	291.1	1.46
1969	40.9	103.6	208.2	352.7	47.2	305.5	1.51
2/ 1970	47.2	91.9	244.8	383.9	51.1	332.8	1.62
% change from '69	+15	-11	+18	+9	+8	+9	+7
5-year average	41.1	135.0	150.3	326.4	42.8	283.7	1.43
% change from 5-year average	+15	-32	+18	+18	+19	+17	+13

1/ Flounder, cod, ocean perch, haddock, pollock, cusk.
2/ Preliminary.

supplies. Flounder and ocean perch consumption may have been hurt in the latter part of 1970 by high prices.

Consumption is expected to be about 180 million pounds during January-June 1971, not much different from the 181 million consumed in the first half of 1970. Flounder and ocean perch consumption likely will be up, while consumption of cod, haddock and pollock will be down.

World landings of cod are not expected to increase in 1971, and may possibly drop slightly in the next 2 years. If, however, the potential demand for cod fillets in the United States generated by fish and chip franchises remains strong, and demand for sticks and portions levels off because of higher prices, then a larger percentage of cod will be diverted to fillet production.

HALIBUT

Supplies of halibut decreased slightly in 1970, due to quota restrictions. Increased landings by U.S. vessels were offset by decreased imports.

Prices in 1970 were higher than in 1969 at both the wholesale and retail levels. Because of these higher prices, sales in 1970 were a little low relative to the experience of previous years and holdings at the end of the year were unusually high.

Industry fears of lower prices in 1971, because of decreased consumption and higher holdings in 1970, have been abolished due to a large increase in consumption in January 1971. The outlook in 1971 is for firm prices and lower stocks.

WHITING

Supplies of whiting—headless and dressed—were 27 million pounds in 1970, one-fifth below 1969. Supplies have declined continuously for 5 years.

Consumption of whiting declined in 1970 following the downward direction of available supplies. Consumption has also been down for the last 2 years. With the prospect for low landings in 1970, processors paid high prices to fishermen in order to assure a source of supply.

As a result of higher exvessel prices, wholesale prices rose and began to attract substantial quantities of headless and dressed whiting from Argentina and South Africa. Prior to 1970, virtually all whiting were imported as blocks. Inventories of headless and dressed whiting began to build in the summer of 1970, as imports undersold the domestic product.

To meet this competition, domestic processors began to lower wholesale prices, but exporters did likewise, and the price was still dropping as of March 1971. Prospects in 1971 indicate that if wholesale prices continue to fall, imports will begin to shift *back* to blocks, especially in light of the present shortage of blocks in this country.

Consumption of headless and dressed whiting will probably continue to decline, but possibly whiting in other forms—*i.e., blocks and fillets may take up some of the slack.*

SALMON

Salmon supplies were 2.2 million standard cases during the first half of 1970, considerably lower than the previous years; canners and distributors made a concerted effort to reduce stocks during January through June to make room for an anticipated record pack. Biologists had predicted a pack of 5.6 million standard cases, highest since 1941. The pack was larger than usual—3.9 million standard cases—but not a record. Salmon runs in Central and Southeastern Alaska, fell below expectation.

Despite the large pack, inventories have not been excessive in the last half of 1970 and beginning of 1971. Prices for pink salmon were a little higher than 1969, reflecting relatively short stocks. Red salmon were in plentiful supply, but prices remained firm.

The 1971 outlook is for a smaller salmon pack--2.5 million standard cases, which is 36 percent below 1970 and 22 percent below the most recent 5-year average. At the beginning of 1971, inventories were not *excessive*; and the industry is not unduly distressed about moving stocks in light of the lower anticipated pack.

Prices should remain firm for red salmon and may even edge up for pinks. Consumption may rise slightly, primarily because of the carryover from last year's large pack.

TUNA

Supplies of canned tuna increased substantially in 1970. Supplies were estimated at 505 million pounds (edible weight)—8 percent above the previous year. U.S. tuna landings were a record 452 million pounds last year—also 8 percent above 1969. Imports totaled 313 million pounds (product weight), about the same as in 1969. Total production of canned tuna was 21.7 million standard cases in 1970—8.5 percent above the 1969 pack.

Demand for canned tuna was strong during most of 1970; retail prices and per capita consumption both advanced. Exvessel and wholesale prices also increased sharply in 1970, with albacore prices increasing most rapidly.

In the latter part of 1970 and in early 1971, canned tuna was tested extensively for mercury. About 3.6 percent of the country's domestic and imported supplies were found to exceed the Food and Drug Administration's guideline of .5 parts of mercury per million parts of tuna. Tuna exceeding the guideline were withheld from sale or removed from the market.

The outlook is for slightly higher prices and for recovering sales. It is possible that sales could be back to their long-run growth rate by mid-year if not sooner.

SARDINES

The domestic herring fishery continued to decline in 1970; total supplies were 83 million pounds, 11 percent below 1969. U.S. landings decreased to 37 million pounds, about a third below 1969. The pack was below 20 million pounds for the first time in the recent history of the fishery. Contributing to the declining pack were low abundance, unpredictability of the resource, and increasing use of imported sardines.

Imports of sardines increased slightly in 1970, but the category which is most competitive with the U.S. pack—sardines in oil from Canada—more than doubled in volume—4.0 million pounds, compared with 1.9 million in 1969. Both wholesale and retail prices were up in 1970, and consumption was down, but the decline was mostly attributable to lower available supplies.

Prospects in 1971 are for a continued decrease in domestic landings and pack, a continued slight increase in imports, and a little lower consumption.

Holdings—Sharp Drop in Last Quarter

Holdings of blocks at the end of 1970 were 30.7 million pounds, lowest end-of-year inventories since 1964 (fig. 3). Holdings were 29 percent below the previous year and 20 percent below the 1965-69 average. Holdings decreased primarily in the fourth quarter, owing to lower imports in September-December. The sharpest drop in holdings occurred in December.

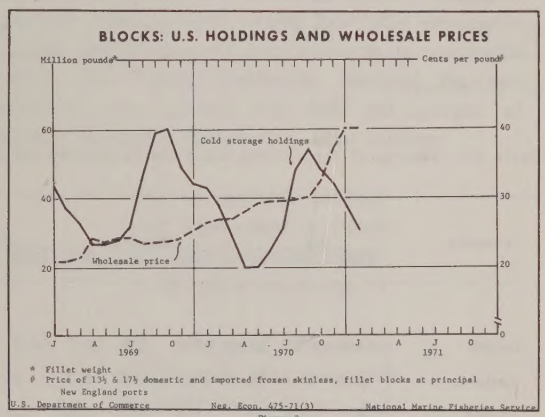


Figure 3

REVIEW AND OUTLOOK

FISH BLOCKS

Review

Supplies

Total supplies of blocks in 1970 increased at about half the growth rate of the past 5 years because of decreased imports in the last half of the year. Supplies were 321 million pounds—up 8 million pounds from 1969. The increase in supplies resulted from larger U.S. freezings and a slight gain in imports.

Imports—Up 2 Percent From 1969

Imports of fish blocks in 1970 were 272.8 million pounds (table 2). This amount represented only a 2-percent increase from 1969 imports, but a 20-percent increase over the past 5-year average. Imports in the first half of 1970, however, were very high—23 percent above the same period in 1969. Imports in the second half were correspondingly low—20.4 million pounds less than second half 1969, with a very sharp drop in the third quarter compared with third quarter 1969.

Once again the major portion of imports was cod blocks, accounting for 72 percent of the total, about the same as in 1969. In 1970, pollock imports were greater than haddock imports for the first time and are now the second largest block import.

Table 2.-- Supplies and utilization of frozen fish blocks, 1960-70

Year	Supplies				Utilization	
	Beginning stocks	U.S. freezings	Imports	Total	Ending stocks	Disapperance
	Million pounds					
1960	23.2	.8	89.7	113.7	24.8	88.8
1961	24.8	1.2	118.6	144.6	17.7	126.9
1962	17.7	1.6	143.5	162.8	24.3	138.5
1963	24.3	2.0	153.3	179.6	25.8	153.8
1964	25.8	2.0	166.2	194.0	20.0	174.0
1965	20.0	2.9	214.8	237.7	37.4	200.3
1966	37.4	6.0	206.5	249.9	35.2	214.7
1967	35.2	6.2	189.5	230.9	32.3	198.6
1968	32.3	3.6	261.1	297.1	44.4	253.0
1969	44.4	2.0	266.6	313.0	43.0	270.0
1/ 1970	43.0	5.1	272.8	320.9	30.7	290.2

1/ Preliminary.

Table 3.-- Imports of fish blocks and slabs by species and country of origin, 1968-70

Country	Cod			Haddock			Flounder			Pollock			Other			Total		
	1968	1969	1970	1968	1969	1970	1968	1969	1970	1968	1969	1970	1968	1969	1970	1968	1969	1970
	Million pounds																	
Canada	64.8	57.2	57.2	5.0	1.5	0.7	13.6	13.1	11.7	5.4	3.1	1.6	17.5	13.8	12.5	106.3	88.7	83.7
Iceland	39.3	38.4	52.1	10.3	6.3	8.3	.2	.7	.1	2.8	2.9	6.8	5.7	5.5	6.0	58.3	54.1	73.3
Norway	24.7	59.9	54.7	5.4	6.7	3.5	.2	.1	-	.3	1.3	11.1	4.0	5.1	2.5	34.6	73.0	71.8
Denmark	18.6	11.6	10.0	1.9	3.7	4.1	-	.7	.1	-	.3	1.1	1.4	1.5	.4	21.9	17.8	15.7
Poland	15.5	14.7	15.0	-	-	-	-	.1	-	-	-	-	-	-	-	15.5	14.8	15.0
Other	13.5	10.9	6.0	.9	1.5	3.7	.1	.3	.2	-	.1	.1	10.0	5.8	3.1	24.5	18.4	13.1
Total	176.4	192.7	195.0	23.5	19.7	20.3	14.1	15.0	12.1	8.5	7.7	20.7	38.6	31.7	24.5	261.1	266.8	272.6

Block imports in 1970 were primarily from Canada, Iceland, and Norway (table 3). These three countries supplied 84 percent of the total U.S. block imports in 1970—up slightly from the 81 percent supplied in 1969.

Demand

Disappearance of fish blocks in 1970 was 290.2 million pounds—up 8 percent from 1969 and up 28 percent from the 1965-69 average. Disappearance in the last half of 1970, however, was 5 percent less than for the same period in 1969.

Cod Block Prices—High in 1970

The wholesale price of cod blocks in December 1970 was a record 40 cents per pound, a 57-percent increase from December 1969. Prices rose steadily throughout the first three quarters of 1970, and then advanced rapidly in the fourth quarter. The average price of cod blocks in 1970 was 30.5 cents per pound. This was an increase of 7.1 cents per pound over 1969.

Wholesale Prices of Other Blocks—Also Up in Last Quarter

Wholesale prices for haddock blocks were fairly steady in the first three quarters of 1970, but

increased 4.2 cents per pound from September through December to a record high of 41.8 cents per pound in December. The average price for the year, 37.4 cents per pound was 1.7 cents per pound over 1969 and 5.2 cents per pound higher than the 1965-69 average. Pollock and ocean perch block prices increased 16 and 19 percent, respectively from 1969.

The rapid price rise in cod narrowed the usual margin in prices between cod and haddock blocks (fig. 4). During 1965-69, cod block prices averaged 6.9 cents per pound lower than haddock. This differential was maintained for 1970 as a whole, but in December cod sold for only 1.8 cents per pound less than haddock.

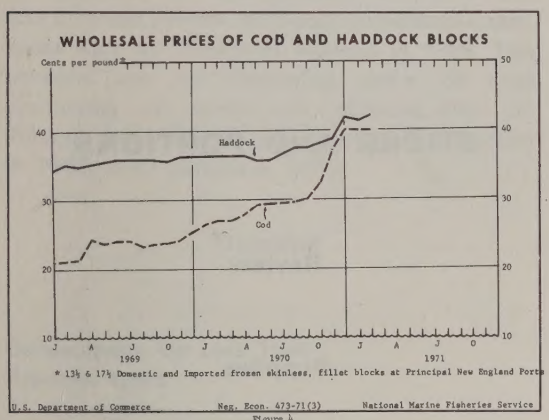


Figure 4

Outlook

Supplies

We estimate supplies of blocks in the first half of 1971 at 143 million pounds. These supplies are likely to be constrained by the level of worldwide landings in the first part of 1971. Inventories were very low in the United States at the end of January. The same was true for the countries that export blocks to the United States. Therefore, new supplies will come almost entirely from the current fishing season.

Indications are that groundfish landings in 1971 might remain the same as in 1970, but they could even drop a little. With increasing worldwide demand for cod products, U.S. importers will find it generally more difficult to obtain blocks in 1971.

Imports—Off in First Half of 1971

U.S. imports of blocks were exceptionally high in the first half of 1970—141.2 million pounds. This level of imports is not expected to be reached in the first half of 1971. In fact, January 1971 imports were 37 percent less than January 1970 imports. Aside from low worldwide current inventories, no improvement in worldwide catch, and higher worldwide demand for cod products, other factors may limit the quantity of blocks, especially cod blocks. They include:

(1) a possible shifting from production of blocks to higher valued fillets in some countries,

(2) changing patterns of world trade that may shift supplies to Eastern and Western Europe and the Soviet Union.

U.S. imports of blocks in the first half of 1971 are expected to be about 110 million pounds—as much as a fifth less than the same period in 1970. This would place total supplies for January-June 1971, at about 143 million pounds, assuming U.S. freezings of 2 million pounds.

The compositon of block imports probably will shift in 1971. For example, in January 1971, only 58 percent of block imports were cod, compared to 70 percent in January 1970. Even though most processors would prefer cod blocks, the scarcity and high price of cod blocks likely will result in more utilization of other species such as flounders, pollock, and possibly whiting.

Inventories—Record Lows Expected

With lower imports of blocks, inventories in 1971 will probably drop from the low level of 30.7 million pounds on January 1, 1971, to the

Table 4.-- Supplies and utilization of fish sticks and portions, 1960-70

Year	Supplies						Utilization		
	Beginning stocks	Production			Imports	Total	Ending stocks	Apparent consumption	
		Sticks	Portions	Total				Total	Per capita
	Million pounds								Pounds
1960	6.9	65.1	49.4	114.5	0.2	121.6	9.1	112.5	.625
1961	9.1	69.8	59.8	129.7	.5	139.2	10.5	128.7	.703
1962	10.5	72.2	78.7	150.9	.3	161.7	11.6	150.2	.807
1963	11.6	79.3	94.6	173.9	.4	185.9	13.6	172.3	.912
1964	13.6	73.6	106.3	179.9	.2	193.7	8.1	185.6	.969
1965	8.1	82.5	140.5	222.9	.3	231.3	14.2	217.1	1.120
1966	14.2	81.4	147.6	229.0	.4	243.6	19.5	224.1	1.144
1967	19.5	73.9	158.3	232.3	.4	252.2	14.0	238.2	1.217
1968	14.0	91.7	182.8	274.5	.9	289.4	24.0	265.4	1.328
1969	24.0	113.4	216.4	329.8	1.6	355.4	25.4	330.0	1.637
1/ 1970	25.4	115.9	233.5	349.4	1.2	376.0	22.5	353.5	1.729

1/ Preliminary.

minimum possible. Towards the end of the first half of 1971, inventories are expected to rebound as supplies increase seasonally. More normal inventories of blocks, however, will probably not be available until third quarter of 1971.

Demand

The disappearance of blocks in 1971 will probably not be so great as in 1970, if, as expected, consumption of sticks and portions decreases in 1971. The various factors that will affect the demand for sticks and portions will ultimately affect the demand for blocks.

Prices—Little or No Weakening in Sight

Prices of cod blocks are not expected to decline to the average levels of 1970. Prices may weaken slightly in the second quarter of 1971, as greater supplies become available, but as of the beginning of March, the price of cod blocks was still firm at 40 cents per pound. Flounder blocks may increase in price to re-establish their traditional premium over cod blocks. Prices for others such as whiting, pollock, and haddock might increase also.

STICKS AND PORTIONS

Review

Supplies

Supplies of sticks and portions continued to set new records in 1970, but total supplies did not increase at the same rate as they have in the past few years. Production of sticks and portions was 349.4 million pounds in 1970, an increase of 6 percent over 1969 (table 4). This increase, however, was much less than the 20-percent growth in production in 1969.

Production Down in Fourth Quarter

Total production in 1970 ran ahead of the previous year's production in every quarter except the fourth, when there was a decline of 1.2 million pounds from the 94.4 million pounds produced in 1969. This fourth quarter decline, which occurred entirely in December, was probably due to a combination of high prices and shortage of blocks.

As a result, inventories in December did not increase, whereas they did in 1968 and 1969.

Production of Fish Sticks Up Slightly

Production of fish sticks rose slightly in 1970 to 115.9 million pounds—up from 113.4 million pounds in 1969. Production of sticks in 1970 was 6 percent greater in the first three quarters than in 1969, but fourth quarter production was less than in 1969.

Production of Fish Portions Growing Faster Than Sticks

Production of fish portions in 1970 was 233.5 million pounds, an 8-percent increase—compared with an 18-percent increase in 1969. Fish portions are an increasing share of total production of sticks and portions (fig. 5). Portions rose from 43 percent of total production in 1960 to 67 percent in 1970.

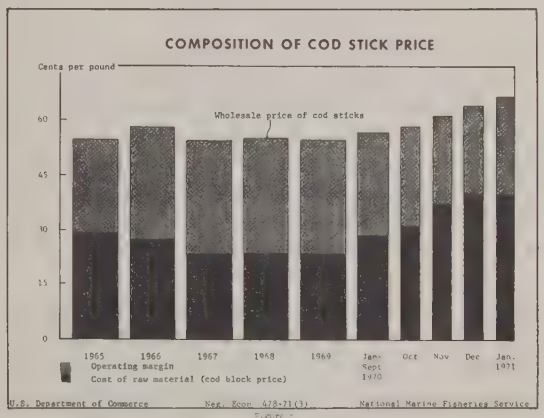
Demand

Consumption Up Less Than Previous Years

Total consumption of sticks and portions was 353.5 million pounds in 1970, 7 percent more than in 1969, and 39 percent higher than the average for the last 5 years. However, the percentage increase was about one-fourth the record increase in consumption in 1969 and about half the average annual percentage increase during 1965-69.

Prices of Cod Sticks and Portions—Up Sharply

The wholesale prices of cod sticks and portions reached record highs in 1970 (table 5), due to the increase in price of cod blocks. Most of the price increase was in the fourth quarter. Although prices of cod sticks rose 8.8 cents per pound and portions 11.8 cents per pound, the increases were less than the 14.5-cents-per-pound rise in prices of cod blocks. One effect of the increases was to compress, at least temporarily, the margins among prices of cod blocks, cod sticks, and cod portions (figs. 6 and 7).



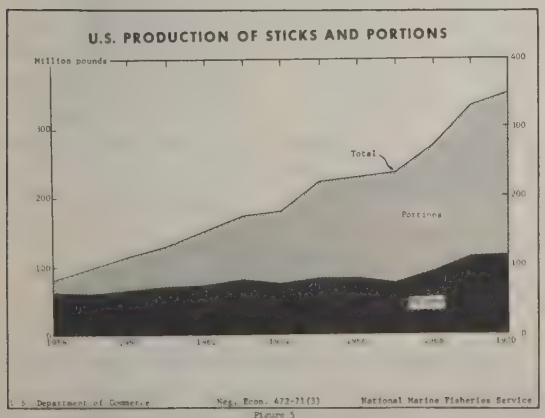


Figure 5

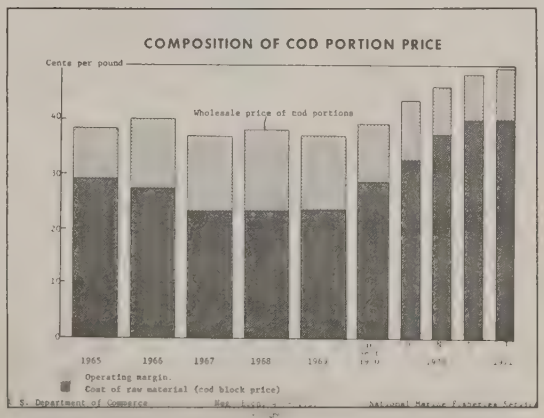


Table 5.-- Wholesale prices of cod and haddock blocks, sticks and portions, monthly, 1968-71

Item/year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual average
	Cents per pound												
Cod blocks													
1968	26.6	26.2	25.5	24.8	24.2	23.5	22.5	21.3	21.3	21.3	21.4	21.4	23.3
1969	21.2	21.2	21.5	24.3	23.8	24.3	24.3	23.5	23.8	23.9	24.3	25.5	23.4
1970	26.5	27.0	27.0	28.0	29.3	29.6	29.6	29.7	30.0	32.5	37.3	40.0	30.5
1971	40.0	40.0											
Haddock blocks													
1968	27.9	28.0	27.8	27.5	27.2	27.5	27.9	27.5	27.5	28.5	30.4	33.5	28.4
1969	34.4	35.1	34.9	35.1	35.8	36.0	36.0	36.0	36.0	35.9	36.4	36.5	35.7
1970	36.5	36.5	36.5	36.5	35.8	35.9	36.7	37.5	37.6	38.1	38.9	41.8	37.4
1971	41.5	42.1											
Cod portions, raw breaded, 2-4 oz. portions													
1968	38.9	39.5	38.5	38.5	37.7	37.5	38.3	37.8	37.0	37.0	37.0	37.0	37.9
1969	37.0	36.6	36.3	37.6	36.8	36.8	37.0	37.5	37.0	37.5	37.5	36.5	37.0
1970	37.5	37.5	38.0	38.0	39.5	39.7	39.9	41.5	43.1	43.5	46.0	48.3	41.0
1971	49.5	49.5											
Haddock portions, raw breaded, 2-4 oz. portions													
1968	43.2	42.0	42.5	40.3	41.6	42.0	41.6	41.5	41.5	41.7	41.5	41.5	41.7
1969	41.5	43.5	45.8	45.1	45.6	46.4	47.5	47.5	47.5	48.0	48.3	49.0	46.3
1970	48.6	48.5	48.5	48.7	49.0	48.3	49.8	51.0	51.9	50.5	50.8	52.7	49.9
1971	54.0	54.5											
Cod sticks, breaded cooked, in 8-oz. pkgs.													
1968	55.7	56.3	56.3	53.3	53.3	53.3	54.8	55.3	55.0	55.0	55.0	55.0	54.8
1969	55.0	54.5	53.0	53.0	53.0	53.0	54.7	54.7	54.7	55.0	55.0	55.0	54.2
1970	55.0	55.0	55.0	57.5	58.0	58.0	58.0	58.0	58.0	58.5	61.3	63.8	58.0
1971	66.3	66.2											
Haddock sticks, breaded cooked, in 8-oz. pkgs.													
1968	61.3	60.0	60.0	59.2	58.8	58.8	58.7	58.5	58.8	58.8	58.8	58.8	59.2
1969	58.8	59.0	59.3	59.7	59.7	59.7	59.7	59.7	59.8	61.2	61.2	59.8	59.8
1970	59.7	59.7	59.7	58.3	58.8	58.8	58.8	58.8	58.2	58.0	60.8	63.2	59.3
1971	66.7	66.7											

Price of Haddock Sticks and Portions—Up Also

The wholesale price of haddock sticks reached 63 cents per pound in December 1970, a 6-percent increase over the year before. Prices of haddock portions also increased—8 percent in 1970. The increase in the price of cod blocks caused an increase in the price of sticks and portions for other species as consumers and processors switched away from cod. Nevertheless, the margins between the prices of cod and haddock were reduced. In fact, in November and December, for the first time, cod sticks sold at a premium over haddock sticks.

Outlook

Supplies

Although production of sticks and portions has risen every year since 1954, we expect it to decrease in the first half of 1971. Total production for the first half of 1971 is estimated at 168 million pounds—6 percent below the same period in 1970. In the first quarter, production is estimated at about 90 million pounds. For the second quarter, production will experience a normal seasonal decline. Two related factors that could cause decreased production are lack of raw materials and higher prices of sticks and portions. If consumption does decrease as expected, producers of sticks and portions will likely reduce production to conform to sales. Even if demand is better than anticipated, production may be constrained by a shortage of blocks. As discussed in the outlook of fish blocks, supplies of blocks are expected to be only 143 million pounds for the first half of 1971.

Demand

The pattern of increasing per capita consumption of sticks and portions may be reversed in 1971. Such a reversal in consumption levels is unprecedented in the history of sticks and portions.

Sales of sticks and portions in the first quarter of 1971 may be about 90 million pounds, 10 million pounds lower than the same period in 1970 and about equal to sales in the first quarter of 1969. For the second quarter of 1971, we estimate a normal seasonal drop to 76 million pounds. Sales in 1971 could be hurt by the higher prices of sticks and portions.

Prices Expected to Remain High

Prices of cod and haddock sticks and portions all reached historic highs in 1970. This pattern continued in January and February 1971. These prices may weaken slightly owing to (1) greater supplies of block material becoming available at lower prices and (2) possible consumer resistance to present high prices. If cod block prices decline, the prices of cod sticks and portions probably will not decline by the same amount as producers try to widen their present low margins. It is doubtful if prices of haddock sticks and portions will decline given the extremely narrow margin now existing between cod and haddock products and the lower level of haddock imports.

FLOUNDERS

Review

Supplies

Total supplies of flounder fillets available for consumption in 1970 were 110.8 million pounds, about 11 percent above 1969 and 12 percent above the 1965-69 average (table 6). A substantial increase in 1970 beginning stocks and rising imports more than offset a slight decrease in flounder landings.

Landings Off

Flounder landings during 1970 were about 42.6 million pounds (fillet weight), 3 percent below 1969, but a fifth less than the 1965-69 average. Around 67 percent of total landings of flounder consisted of yellowtail. Since 1956, yellowtail flounder has increased as a percentage of total

Table 6.-- Supplies and utilization of fresh and frozen flounder, 1960-70

(fillet weight)

Year	Supplies				Utilization		
	Beginning stocks	U.S. landings 1/	Imports	Total	Ending stocks	Apparent consumption	
						Total	Per capita
	Million pounds						Pounds
1960	5.7	43.3	18.7	67.7	7.5	60.3	0.335
1961	7.5	45.4	18.4	71.3	6.1	65.2	.356
1962	6.1	53.0	18.4	77.5	6.2	71.3	.383
1963	6.2	60.3	16.6	83.0	8.0	75.0	.398
1964	8.0	60.1	21.6	89.7	9.0	80.7	.422
1965	9.0	61.3	24.1	94.4	6.6	87.9	.453
1966	6.6	59.5	34.7	100.8	10.2	90.6	.463
1967	10.2	52.1	33.3	95.6	10.7	84.9	.429
1968	10.7	53.1	39.5	103.3	7.8	95.5	.477
1969	7.8	43.9	48.1	99.8	9.3	90.5	.448
2/ 1970	9.3	42.6	58.9	110.8	15.8	94.5	.461

1/ Includes estimated Pacific landings.
2/ Preliminary.

U.S. flounder landings. In 1956, yellowtail was only 22 percent of the landings.

Imports Up

Imports of flounder fillets in 1970 were 58.9 million pounds, a 22-percent increase over 1969. Except for a slight drop in 1967, imports have increased in every year since 1963. The rising wholesale price has provided the main inducement for this trend. Over 90 percent of flounder imports came from Canada and were almost entirely frozen fillets.

Inventories Soar in Late 1970—Record Carryover in 1971

Inventories of flounder fillets have been rising steadily since mid-1969, due primarily to the parallel increase in imports from Canada. Flounder holdings on January 1, 1971 reached a record peak of 15.8 million pounds, but declined by March 1 to 11.6 million pounds. Inventories, however, were still almost twice those on hand in March 1970.

Canadian cold storage holdings of flounder fillets were also higher than average. Since October 1, 1970, Canadian holdings have averaged 7.6 million pounds, more than double those in 1969.

Demand

Consumption Up Little

Consumption of flounder fillets has been rising over the past 7 years. Total consumption of flounder fillets last year was 94.5 million pounds, about 4 percent above 1969. The 1970 increase was possibly a result of lower supplies of some other groundfish, notably haddock.

Exvessel prices for domestic yellowtail flounder declined steadily from June 1970 (16.2 cents per pound) to December 1970 (10 cents per pound). Prices in January 1971 fluctuated widely from 8 to 20 cents. Exvessel prices in the latter part of 1970 dropped despite seasonally low domestic landings during the fourth quarter. While exvessel prices for flounder declined in the last half of 1970, wholesale prices for both Canadian and domestic flounder slipped only slightly in the last half of 1970, despite rising inventories. Although consumption of flounder rose a little in 1970, it appears that consumption could have been greater if wholesale and retail prices had been lower.

Imports vs. Domestic Share of Consumption

At present, about 80 percent of the domestic flounder catch is sold fresh. Much of this domestic product is now going to cities outside of the New England area, such as Baltimore, Philadelphia, Washington, and New York. As imports of flounder fillets continue to increase, distributors have been forced to begin lowering prices in order to alleviate the stock buildup.

It is often difficult for the fresh domestic product to compete at the retail level with frozen flounder fillets that have been thawed out by retailers. At the same time, the domestic frozen product being held in cold storage has difficulty competing in price with imported frozen products.

Stock-to-Consumption Ratio Up

Although holdings have been increasing, apparent consumption has remained fairly stable. Thus, the abnormal buildup of inventories to consumption is a good indication of the back-up in channels of distribution. This ratio has risen since June 1969 (fig. 8). Stock to consumption ratios were very low in the late spring of 1969; nonetheless, the ratio has become unusually high since May 1970.

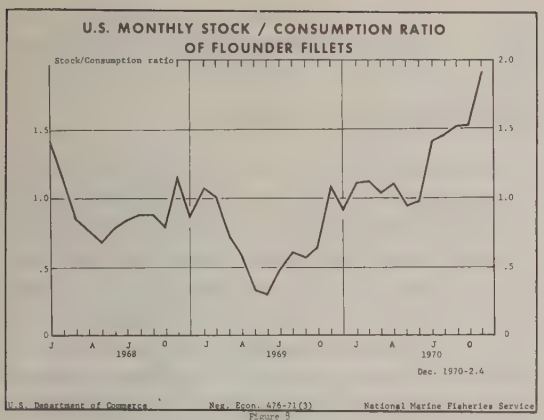


Figure 5

Outlook

Supplies

Total supplies of flounder fillets during the first 6 months of 1971 are expected to be 60 to 65 million pounds, compared with 58 million pounds available during the comparable period in 1970. Increases in supplies will be due primarily to heavier cold storage holdings and slightly larger imports than in January-June 1970.

Quotas Set for Domestic Yellowtail Flounder Fishery

Annual and quarterly quotas for yellowtail flounder have been instituted by ICNAF (International Commission on North Atlantic Fisheries) beginning in 1971. These quotas cover all nations fishing in the principal flounder producing areas. The 1971 annual quota is 29,000 metric tons. The quota will probably reduce the yellowtail proportion to around 55 to 60 percent of the total flounder catch, after representing 67 percent of the catch in 1970.

Landings Estimated to Be Slightly Lower

Despite the quotas for yellowtail, domestic flounder landings of all species for the first 6 months of 1971 may be 21 million pounds (fillet weight), only slightly off from the 21.9 million pounds landed during January-June 1971. It is expected that some increased effort will be devoted to other flounder species to compensate for any shortage of yellowtail.

Imports—Higher Than Average Expected

Flounder fillet imports in the first 3 months of 1971 may decline as much as 25 percent below the 16.7 million pounds imported in the fourth quarter of 1970. We expect them, however, to be about even with January-March 1970. In January 1971, the imports were 4.2 million pounds, .8 million pounds less than in January 1970. Imports may rise to slightly over 14 million pounds in the second quarter—as much as a million pounds higher than last year.

Imports of flounder fillets are almost entirely from Canada. Their future level will continue to depend primarily on the United States wholesale price level for flounder fillets, (fig. 9).

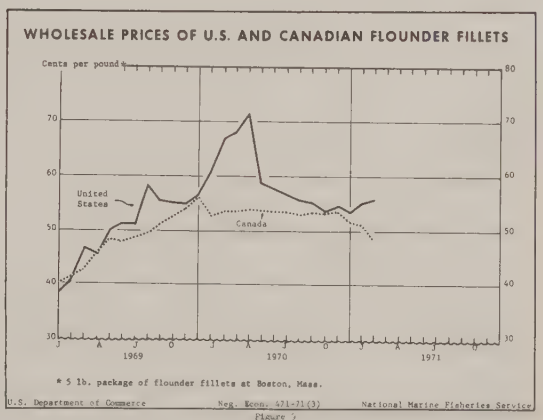


Figure 9

Canadian landings in 1970 were about 8 percent higher than in 1969, compared to a general 2-percent decrease in overall Canadian landings of groundfish. No reduction in Canadian landings is likely in 1971. ICNAF quotas should not materially affect Canadian flounder fishing since most of her flounder catch is in areas with no yellowtail quotas. Also, with lower abundance of haddock and cod, the Canadians will be turning more to flounder.

U.S. wholesale prices for flounder fillets dropped slightly at the end of 1970, and the first few weeks in 1971, primarily to alleviate the buildup of excess inventory. Distributors, however, may now want to hold prices steady in order to take advantage of the seasonally high consumption rates for flounders at Lent and during the second quarter of the year.

Demand

Consumption Likely to Rise

Prices of flounders, after dipping at the end of 1970, began to level off somewhat at the beginning of 1971. At current prices, sales of flounder fillets may be 53 million pounds during the first half of 1971, 5 million pounds higher than in 1970. Consumption is expected to be about 27 million pounds in the first quarter of the year and 26 million in the second quarter. This would leave cold storage holdings of about 11.5 million pounds on April, 1, 1971, 4 million

Table 7.-- Monthly exvessel, wholesale and retail prices of flounder, 1968-71

Month	Exvessel price 1/											
	Yellowtail				Blackback & lemon sole				Sea dab			
	1968	1969	1970	1971	1968	1969	1970	1971	1968	1969	1970	1971
	Cents per pound											
January	13.3	9.5	18.8	13.1	24.9	15.0	21.9	18.0	17.9	14.4	20.1	17.1
February	18.3	16.7	21.3	16.4	23.3	19.1	24.9	21.4	20.5	16.7	18.9	15.4
March	12.0	14.2	21.5		21.6	15.0	17.9		18.5	12.5	15.5	
April	11.8	14.0	17.6		12.1	10.9	14.4		12.5	9.0	10.7	
May	9.5	12.4	11.1		11.8	10.7	10.7		10.9	9.8	9.8	
June	11.7	12.8	16.2		11.2	11.1	15.5		11.0	9.8	12.5	
July	8.0	14.6	14.6		15.5	18.2	16.8		11.9	15.3	15.0	
August	9.2	14.3	14.1		18.2	20.3	20.2		14.5	13.4	14.9	
September	9.0	12.3	12.9		16.8	13.3	16.4		13.3	11.6	13.2	
October	9.5	14.7	11.6		14.4	15.8	12.0		12.2	14.0	13.1	
November	14.7	14.7	9.7		10.7	15.7	10.8		11.9	16.3	11.9	
December	9.2	13.4	9.8		13.5	16.8	14.8		16.9	16.6	13.6	
Average	11.3	13.6	15.0		16.2	15.2	16.4		14.3	13.3	14.1	

Month	Wholesale price 2/				Retail price 3/							
	Fillets, frozen				Fillets, fresh				Drawn, fresh			
	1968	1969	1970	1971	1968	1969	1970	1971	1968	1969	1970	1971
	Cents per pound											
January	38.5	42.5	57.5	52.0	102.5	104.0	131.4	135.0	62.2	61.0	72.0	72.8
February	38.5	42.5	53.5	50.0	103.5	101.5	137.8	142.8	64.5	64.3	74.3	81.0
March	38.5	48.0	54.0		117.3	131.8	138.6		69.0	66.3	75.2	
April	37.5	48.5	54.0		102.2	116.5	135.2		59.6	57.4	72.8	
May	41.5	49.0	53.5		99.0	109.0	125.3		57.2	52.5	64.0	
June	41.5	52.0	53.5		100.2	111.8	130.3		56.7	59.0	64.9	
July	41.5	54.4	54.0		99.4	112.3	128.0		56.3	60.2	66.4	
August	37.5	58.0	54.0		99.0	115.1	124.0		58.5	71.5	72.8	
September	37.5	55.5	53.5		94.4	115.7	124.0		62.3	68.2	73.0	
October	39.5	54.0	54.0		99.8	112.4	124.0		63.0	64.5	68.8	
November	40.0	55.5	53.5		105.1	119.0	131.5		60.5	67.8	67.8	
December	40.5	57.5	53.0		99.5	119.5	123.0		59.8	63.5	69.8	
Average	39.4	51.4	54.0		101.8	114.1	129.4		60.8	63.0	70.1	

1/ Weighted average, New Bedford, Mass.
2/ Skinless, 1-lb. package, at Boston, Mass.
3/ Most general prices at New York, N.Y.

pounds higher than April 1970. Inventory levels may work down to 10 million pounds by July 1, 1971, only slightly higher than the 9.7 million held last July. The wholesale price for flounder fillets will be about 10 cents per pound higher than for cod fillets (table 7, fig. 10).

If the price margins between cod and flounder fillets in the spring and summer of 1971 begin to narrow once more, it is possible that institutional users will begin to resort to flounder fillets, if supplies are heavy.

In order to help reduce present inventories of flounder fillets, the U.S. Department of Agriculture and the National Marine Fisheries Service, Department of Commerce, in cooperation with the flounder industry are participating in an educational campaign. Flounder fillets will be included in the U.S. Department of Agriculture "List of Foods in Plentiful Supply for the Month of April."

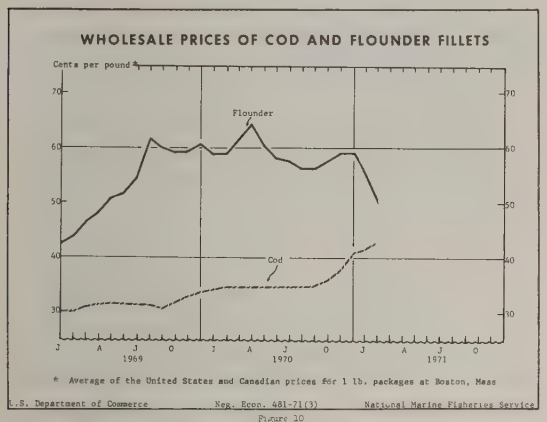


Figure 10

COD

Review

Supplies

Total supplies of cod fillets during 1970 were 124.8 million pounds, a jump of 40 percent over 1969, and 85 percent over the 1965-69 average (table 8). This increase, however, occurred during the first 3 quarters of the year. The fourth quarter of 1970 showed a complete reverse and available supplies were only equal to the fourth quarter of 1969, as imports declined considerably.

Landings Decline in 1970

World cod landings in 1970 continued the high levels reached in 1969. U.S. landings of cod in 1970, however, were only 16.2 million pounds, fillet weight, 17 percent below 1969 and 3 percent below the 1965-69 average. On an absolute

Table 8.-- Supplies and utilization of fresh and frozen cod, 1960-70

(fillet weight)

Year	Supplies						Utilization		
	Beginning stocks	Landings			Imports	Total	Ending stocks	Apparent consumption	
		Atlantic	Pacific	Total				Total	Per capita
	Million pounds								Pounds
1960	14.4	13.1	1.6	14.7	29.6	58.7	7.8	50.9	0.283
1961	7.8	15.1	.9	16.0	32.2	56.0	7.1	49.0	.268
1962	7.1	15.2	1.0	16.2	33.0	56.2	9.7	46.6	.250
1963	9.7	13.7	1.9	15.6	32.7	58.0	8.9	49.1	.260
1964	8.9	12.6	1.9	14.5	33.5	56.9	6.2	50.7	.265
1965	6.2	11.8	3.0	14.8	33.7	54.7	5.7	49.1	.253
1966	5.7	12.2	3.0	15.2	40.8	61.7	12.7	49.0	.250
1967	12.7	14.0	2.7	16.7	32.1	61.5	6.5	55.0	.278
1968	6.5	15.2	2.4	17.5	46.6	70.7	7.6	63.1	.317
1969	7.6	17.5	2.0	19.5	61.9	89.0	12.9	76.1	.377
1/ 1970	12.9	15.5	.7	16.2	95.7	124.8	7.4	117.4	.576

1/ Preliminary.

basis, U.S. landings trended gradually upward until 1970 when they dropped. The domestic catch has fared poorly, however, relative to imports. In 1960, U.S. cod landings were equal to 33 percent of the total quantity of landings and imports. By 1970, landings were only 14 percent.

**Imports Up for the Year—
but Down in Fourth Quarter**

In recent years, imports have largely dictated the quantity of cod fillets available for consumption in the United States. In 1970, 95.7 million pounds of cod fillets were imported, half again higher than 1969. The rising trends in imports has continued unabated since around 1960. Two major inducements have been: (1) increasingly attractive U.S. wholesale prices for cod, and (2) steadily increasing domestic consumption of this species. The only two constraints on imports have been the abundance of cod in international waters, and the amount of raw material going into production of cod blocks. In the fourth quarter of 1970, imports dropped sharply, as the world inventories of cod decreased. Although cod fillet imports declined considerably in the fourth quarter, they were still at a higher level than any quarter prior to 1970.

In 1970, Iceland increased its share of U.S. imports of cod fillets, while Canada's share declined.

**Cold Storage Holdings
Follow Import Trends**

As with imports, cold storage holdings started high at the beginning of 1970—12.9 million pounds, about double January 1, 1969—but by January 1, 1971, had dropped to 7.4 million pounds, and were only 7.0 million pounds on March 1. Scarcity of cod fillets was also reflected in the low level of Canadian holdings of cod fillets during 1970—averaging 3.5 million, 26 percent below 1969. By the end of 1970, Canadian holdings were only 2.1 million.

Demand

Higher Exvessel Price!

Domestic exvessel prices for cod in 1970 averaged 13.6 cents per pound, 30 percent higher than in 1969, and 38 percent above the 1965-69 average; these prices weakened in the fourth quarter.

**Wholesale Prices Rise
Sharply at End of 1970**

Wholesale prices of cod fillets remained at 34 to 35 cents per pound throughout most of 1970, or around 13 percent above 1969. Prices rose sharply in the last quarter of the year to reflect short inventories (table 9). By December, the wholesale price for a 1-pound pack of frozen skinless fillets at Boston had reached 41 cents per pound—22 percent above the previous December. The price for Icelandic boneless fillets has averaged considerably higher. Prior to 1969, cod fillet prices generally declined shortly after inventories reached their peaks, and increased when supplies were light. From the beginning of 1969 through October 1970, however, wholesale prices have shown a steady increase, even when supplies has increased (fig. 11)—further evidence of the increasing demand for cod fillets. When supplies began to dwindle in the fourth quarter 1970, an extremely high percentage of available stocks was consumed.

Consumption Up Sharply

U.S. consumption of cod fillets totaled 117.4 million pounds during 1970—54 percent higher than in 1969 and about double the most recent 5-year average. This was both the highest absolute and relative consumption increase of any groundfish. Although cod fillet consumption dropped from the third to the fourth quarter in 1970, it remained substantially above 1969.

The quantity of cod fillets consumed in this country during the last 6 months of 1970 has been

Table 9.-- Monthly exvessel, wholesale, and retail prices of cod, 1968-71

Month	Exvessel price 1/				Wholesale price								Retail price 4/			
					Frozen fillets 2/				Fresh fillets 3/				Fresh fillets			
	1968	1969	1970	1971	1968	1969	1970	1971	1968	1969	1970	1971	1968	1969	1970	1971
	Cents per pound															
January	14.1	11.1	15.7	20.3	33.7	30.0	34.0	41.5	70.7	60.0	78.0	93.3	87.6	82.8	92.5	112.8
February	12.9	12.8	14.7	13.4	33.6	30.0	34.5	42.8	64.8	69.0	75.0	89.1	82.3	80.8	95.0	119.3
March	10.2	9.7	15.0		32.5	31.0	34.5		62.1	65.0	85.0		86.8	89.8	98.0	
April	6.8	7.6	11.8		33.0	31.4	34.5		57.6	55.0	80.0		85.1	88.2	104.0	
May	6.0	6.6	8.2		32.5	31.5	34.5		50.2	55.0	59.0		80.9	84.0	97.8	
June	6.7	6.0	10.7		31.5	31.5	34.5		51.1	54.0	62.0		80.2	84.5	105.3	
July	6.7	10.9	11.5		31.1	31.4	34.5		51.5	62.0	70.0		80.8	88.6	99.6	
August	7.2	11.0	16.2		30.0	31.3	34.5		50.3	61.0	78.0		76.5	93.1	96.5	
September	7.1	10.6	15.2		30.0	30.8	34.7		55.5	60.0	80.0		80.0	89.1	102.3	
October	8.4	12.0	14.1		30.0	31.7	35.7		56.4	65.0	72.0		81.0	86.4	107.8	
November	9.4	14.4	13.1		30.0	32.9	37.8		60.9	76.0	73.5		83.0	99.0	106.5	
December	11.9	13.7	16.4		30.0	33.5	40.9		61.3	71.0	79.4		87.8	92.8	109.2	
Average	5/ 8.9	5/ 10.5	5/ 13.6		31.5	31.4	35.4		57.7	62.8	74.3		82.7	88.3	101.2	

1/ Weighted average at principal New England ports.
2/ 1-lb. package, at Boston, Mass.
3/ At New York City Fulton Market.
4/ Fillets fresh, most general prices at New York City.
5/ Annual weighted average.

tied very closely to the level of imports (fig. 12). Existence of strong demand for cod fillets was especially evident in the last quarter of 1970, when in light of a 21-percent drop in supplies from the third quarter, consumption declined only 15 percent even though prices rose substantially.

One factor that has contributed strongly toward increased consumption of cod in recent years has been the growth in the 1960's of fast-food outlets, and more lately, the advent of the fish and chips chains.

Fish and chips outlets have used imported boneless cod fillets almost exclusively. The sharp increase in prices of cod fillets resulted in menu prices advancing to well above $1.00 during the last half of 1970. To keep menu prices from continuing to spiral upward, chains began testing other lower-priced species of groundfish.

In early 1969, there were a little over 100 fish and chips stores. By 1970, the total number was close to 1,000. If the average annual volume per store is 40-50,000 pounds of cod fillets, the fish and chip stores may have used about 45 million pounds of cod fillets—roughly a third of all cod fillets.

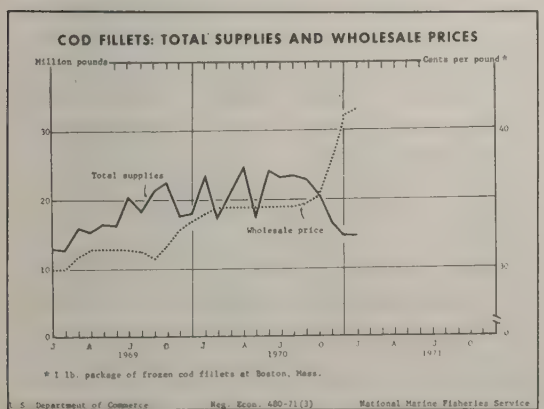
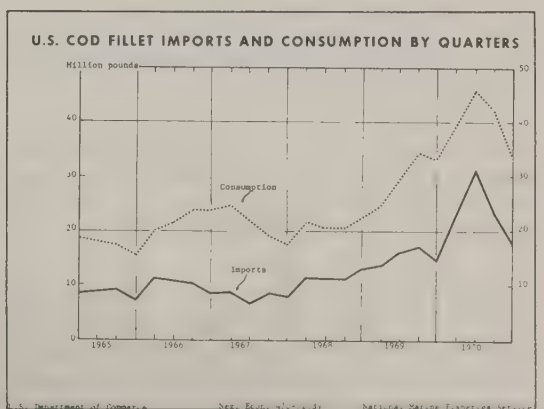


Figure 11



Outlook

Supplies

Total supplies of cod fillets in the first 6 months of 1971 probably will be as much as 57 million pounds, 25 percent below the amount available during the first half of 1970, but 21 percent higher than the supplies available January-June 1969.

Inventories Expected To Continue Decline

Cold storage holdings of cod fillets reached their highest peak in several years on July 1, 1970—14.7 million pounds. Since then, they have declined continually, as imports dropped and consumption rose. By March 1971, inventories dropped to 7 million pounds and probably will continue to fall to around 6 million pounds at the beginning of the second quarter.

Imports—Growth at a Slower Rate

The quantity of cod fillet imports in the first half of 1971 may recover slightly from the 18 million pounds imported during the fourth quarter of 1970 but will be less than in the first half of 1970. Imports in January 1971 were down 32 percent from January 1970. Imports are estimated at 19 million pounds in the first quarter of 1971 and about 23 million pounds in the second quarter—17 and 26 percent below 1970 totals. First half imports for 1971, however, may be around a third above the 1966-70 average for January-June.

Cod fishery prospects, worldwide, are less bright in 1971 than in 1968-70. Harvests probably will not increase again until 1972 or 1973.

As long as the world supplies of cod are scarce and the U.S. wholesale and retail prices for cod fillets remain higher than prices for cod blocks, countries such as Iceland, Denmark, and Norway are expected to give priority to the fillet market. As of mid-February, the wholesale price of cod blocks was 40 cents per pound, and cod fillets, 42.8 cents. Imported boneless cod fillets were 5 to 10 cents per pound higher. We expect this margin to remain stable and perhaps even widen somewhat.

Iceland will continue to represent a high proportion of cod fillet imports, and Canada may have a smaller share in the future. The following factors may reduce Icelandic imports of cod fillets in the long run:

(1) Worldwide market prices for cod fillets have become increasingly competitive with United States prices, particularly in West Germany

(2) Scandinavian countries are becoming increasingly willing to contract with East European countries thereby diverting supplies away from United States markets.

Demand

Consumption—Lower Than 1970—Constrained by Supplies

On the basis of limited supplies of cod fillets, and current March prices (42-43 cents per pound), we expect that consumption for January-June 1971 to be about 54 million pounds, 13 percent below January-June 1970 consumption of 62 million pounds but 46 percent higher than the 1966-70 average. With total available supplies of 57 million pounds, ending stocks on June 30 would be near a record low of 3 million pounds, 11.7 million pounds lower than the 14.7 million pounds available on July 1, 1970. If the wholesale price of cod fillets increases from 42 to 48 cents per pound during the second quarter of the year, apparent consumption from January-June would total about 49 million pounds, leaving inventories on July 1, 1971 of 8 million pounds.

Even in light of possibly higher price levels, a continued strong demand for cod is expected, meaning that an unusually large percent of supplies will be consumed.

The total quantity of groundfish fillets consumed during 1971 is dependent, to a large extent, on the willingness of end-users—particularly fast-food drive-ins, fish and chip outlets and retail food chains—to substitute other more plentiful species for cod.

In certain locations such as the Boston metropolitan area, it is presumably much more difficult to substitute other species for cod and haddock. In other sections of the country, however, abundant supplies of flounder and perhaps ocean perch could eventually compensate for short supplies of cod and haddock.

HADDOCK

Review

Supplies

Total supplies of haddock fillets available during 1970 were 45.7 million pounds, 5 percent below 1969 (table 10). Available supplies would have been still lower had not haddock imports increased slightly in 1970.

Landings Restricted by Closing in ICNAF Subareas

Domestic landings of haddock in 1970 were 9.1 million pounds (fillet weight)—41 percent below the previous year. By 1970, U.S. landings were less than one-third of imports.

As a result of restriction in ICNAF subarea 5, domestic haddock catch in the fourth quarter of 1970 was only 1.6 million pounds (fillet weight). The percentage of scrod haddock harvested has continued to decline since 1966, and in 1970 scrod represented only 19 percent of the total haddock catch.

Prices received by fishermen in 1970 reflected the decline in landings. The annual average exvessel price was 28.1 cents—a third higher than in the previous year.

Imports Show Long-Term Growth

Haddock fillet imports have shown two trends in recent years. First, the quantity of imports has risen steadily since 1965, when 17.0 million pounds were imported. By 1970, total imports of

Table 10.-- Supplies and utilization of fresh and frozen haddock, 1960-70

(fillet weight)

Year	Supplies				Utilization		
	Beginning stocks	Landings	Imports of fillets	Total	Ending stocks	Apparent consumption: Total	Apparent consumption: Per capita
	Million pounds						Pounds
1960	10.2	41.7	18.2	70.1	8.1	62.0	0.345
1961	8.1	46.9	21.1	76.1	10.3	65.8	.354
1962	10.3	47.1	20.6	78.0	5.4	72.6	.385
1963	5.4	43.5	19.8	68.7	4.8	63.9	.334
1964	4.8	46.9	19.1	70.8	7.4	63.4	.327
1965	7.4	47.0	17.0	71.4	6.7	64.7	.334
1966	6.7	46.4	21.5	74.6	7.9	66.7	.340
1967	7.9	34.6	21.4	63 9	6.9	57.0	.288
1968	6.9	24.6	26.7	58.2	4.8	53.4	.267
1969	4.8	15.3	28.1	48.2	7.1	41.1	.203
1/ 1970	7.1	9.1	29.5	45.7	5.8	39.9	.195

1/ Preliminary.

haddock fillets reached 29.5 million pounds, 5 percent greater than 1969, and 29 percent greater than the most recent 5-year average (fig. 13). Secondly, there has been a substantial shift in

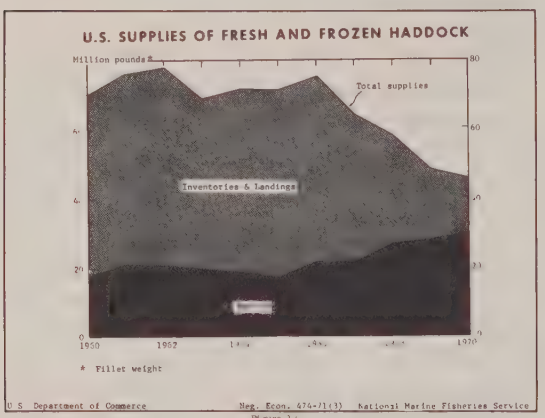


Figure 14

the proportions of haddock being shipped from various countries. In recent years, Canada's share has dropped while Norway, Denmark, and Iceland have increased their shares. Canada's exports to the United States dropped primarily because of low abundance of the species.

Inventories Off From End of 1969

Cold storage holdings of haddock fillets on January 1, 1970, were 7.1 million pounds, 48 percent above the unusually low holdings at the beginning of 1969. Holdings in the second half of 1970 began to decline, however, as domestic landings were light. By January 1, 1971, inventories were 5.8 million pounds, 18 percent below January 1, 1970. March 1 holdings were 6.4 million pounds.

Demand

Prices Stable for Frozen —High for Fresh

The wholesale price for frozen haddock fillets were relatively stable and averaged 54.7 cents per pound in 1970, 4 percent higher than 1969 (table 11). Virtually all frozen haddock fillets in the United States are now imported.

Fresh haddock fillets averaged 91.4 cents per pound, wholesale, in 1970, 18 percent higher than 1969. The primary cause for higher prices was scarce supplies of the fresh product.

Table 11.-- Monthly exvessel, wholesale, and retail prices of haddock in the United States, 1968-71

Month	Exvessel price 1/				Wholesale price: Fresh fillets 2/				Wholesale price: Frozen fillets 3/				Retail price 4/			
	1968	1969	1970	1971	1968	1969	1970	1971	1968	1969	1970	1971	1968	1969	1970	1971
	Cents per pound															
January	19.2	24.2	33.9	39.8	85.0	83.5	115.0	116.5	37.5	52.0	55.0	61.0	66.8	69.1	80.6	93.8
February	20.1	24.4	33.8	29.3	69.5	87.0	112.5	73.5	39.5	52.5	55.0	56.5	67.2	70.1	83.5	96.4
March	14.3	18.0	27.6		38.5	86.5	70.0		41.0	53.0	55.0		66.5	70.1	85.3	
April	10.2	13.9	19.6		50.0	46.0	67.5		42.0	52.0	55.0		67.1	71.3	86.0	
May	12.3	16.6	18.0		44.0	59.0	56.0		38.5	51.0	53.5		67.5	72.6	87.4	
June	13.2	13.0	23.7		52.0	50.0	74.5		38.5	51.0	53.5		67.7	73.4	88.4	
July	12.3	20.3	26.6		54.0	78.5	89.0		38.5	51.0	53.5		67.6	74.6	89.0	
August	14.2	21.1	31.7		53.0	73.5	94.5		39.0	51.5	53.5		67.8	75.9	89.4	
September	14.2	22.6	27.7		52.0	73.0	97.0		41.5	51.5	54.5		67.5	76.8	90.0	
October	16.9	24.5	26.5		70.0	76.0	73.5		53.0	53.5	54.5		67.9	77.6	90.9	
November	18.6	26.0	33.9		80.5	118.5	102.5		52.5	53.5	55.5		68.1	78.3	91.5	
December	27.3	28.9	34.7		85.0	97.5	145.0		50.5	55.0	57.5		68.7	79.7	92.6	
	5/	5/	5/													
Average	14.7	21.1	28.1		61.1	77.4	91.4		42.7	52.3	54.7		67.5	74.1	87.9	

1/ Weighted average for large and scrod, New England principal ports.
2/ Skins on, 20-lb. tins, Boston.
3/ Canadian, skins on, 1-lb. packages, f.o.b. Boston.
4/ One-pound packages, Bureau of Labor Statistics 47-city U.S. average price.
5/ Annual weighted average.

Consumption Drops As Supplies Diminish

Apparent consumption of haddock fillets in 1970 was 39.9 million pounds, 3 percent below the 41.1 million pounds consumed in 1969. Fourth quarter consumption dropped 30 percent from 1969 as total supplies declined. Declining consumption has been due almost entirely to lack of available supplies.

Because of extremely high prices and scarce supplies, fresh haddock fillets are continuing to satisfy, for the most part, only a small local market for the product in the greater Boston area.

Outlook

Supplies

We expect supplies of haddock fillets to drop to around 15 million pounds in the first quarter of 1971, almost 3 million pounds lower than the first quarter of 1970. Second quarter supplies may be about 11 million pounds, almost 5 million pounds below 1970. Lighter landings and a decrease in imports will account for lower total available supplies.

Landings Expected To Decline

Domestic landings of haddock probably will continue to drop in 1971. A little less than a million pounds (fillet weight) is predicted for the first quarter of 1971, compared to 1.5 million in 1970. Second quarter landings may increase seasonally, but only to 2 million pounds, about half of last year's second quarter landings.

ICNAF has established annual quotas for haddock in the major haddock fishing areas. The quota in the main United States fishing areas is 66,460,000 pounds and in the principal Canadian area is 39,690,000 pounds.

These quotas are not expected to be reached until September 1971, at the earliest. A 2-month closed season (March and April) has also been set for two haddock spawning areas in the ICNAF regulation area.

Imports Expected To Slip

U.S. imports of haddock fillets will most likely decline in the first 6 months of 1971 to a little over 14 million pounds, a 22-percent decrease from 1970. A decline in imports is predicted because each of the major suppliers indicate a less than promising year for haddock fillet exports. Canada's haddock landings in 1970 were 40 percent below 1969, and there is little indication that fishing in 1971 will be any better. Traditionally, Danish processors have utilized small haddock for industrial purposes, and it is only recently that they have begun to develop a *food* fish market for their product. The Norwegian haddock fishery has been declining and in 1970 production and exports of frozen haddock fillets were substantially below 1969. Continued prospects for a scarce resource in 1971 may very well restrict Norway's haddock exports this year.

Demand

Consumption Off

Given current prices and anticipated lower supplies, consumption of haddock fillets during the first half of 1970 is expected to be 20 million pounds, a fourth below the first 6 months of 1970. We expect consumption of 12 million pounds in the first quarter, 3 million pounds less than in January-March 1970, and 8 million pounds in the second quarter, almost 4 million pounds below last year. This would leave cold storage holdings both April 1, and July 1 of about 3 million pounds, almost a million pounds below the levels in comparable periods last year.

While haddock fillets would ordinarily be the best substitute for cod in the markets, and the institutional market in particular, high prices and scarce supplies will eliminate haddock for future consideration in these markets—at least in the short run.

POLLOCK

Review

Supplies

Total supplies of Atlantic pollock and cusk fillets during 1970 were 11.9 million pounds 17 percent above 1969 and 28 percent higher than the 1965-69 average (table 12). Larger than normal pollock inventories at the beginning of 1970 and an 0.8-million-pound increase in imports during the year were the primary reasons for the rise in supplies.

Imports Up—Drawn By Higher Prices

Imports of pollock fillets were 6.7 million pounds in 1970, 14 percent higher than in 1969, and 40 percent above the 1965-69 average. U. S. imports of pollock have increased steadily since 1967; primarily because of expanded domestic markets. In recent years, a larger percentage of these imports has tended to originate from countries other than Canada—in particular Norway, Denmark, and Iceland. Imports have been heaviest in the last quarter of the year, coinciding with the peak U.S. landings season.

Demand

Prices Climb Steadily During 1970

Wholesale prices of pollock fillets increased steadily throughout 1970 (table 13). Pollock had the largest percentage price increase of any groundfish.

Table 12.-- Supplies and utilization of Atlantic pollock and cusk, 1960-70
(fillet weight)

Year	Supplies					Utilization		
	Beginning stocks 1/	Landings		Imports	Total	Ending stocks 1/	Apparent consumption	
		Pollock	Cusk				Total	Per capita
	Million pounds							Pounds
1960	1.7	7.8	0.7	3.7	13.8	1.3	12.5	0.070
1961	1.3	7.5	.7	4.5	14.0	1.4	12.6	.069
1962	1.4	5.7	.7	4.9	12.6	1.0	11.6	.062
1963	1.0	5.1	.7	4.4	11.3	1.0	10.3	.054
1964	1.0	4.7	.8	4.2	10.7	.8	9.9	.052
1965	.8	4.2	.8	3.7	9.4	2.0	7.3	.038
1966	2.0	2.3	.8	4.6	9.8	1.0	8.8	.045
1967	1.0	2.1	.6	4.3	8.1	.9	7.2	.036
1968	.9	2.3	.5	5.4	8.9	1.0	7.9	.039
1969	1.0	3.2	.1	5.9	10.2	1.5	8.7	.043
2/ 1970	1.5	3.3	.4	6.7	11.9	1.0	10.9	.053

1/ Pollock only.
2/ Preliminary.

Table 13.-- Monthly exvessel and wholesale prices of pollock and exvessel prices of cusk, 1968-71

Month	Pollock								Cusk			
	Exvessel price 1/				Wholesale price 2/				Exvessel price 1/			
	1968	1969	1970	1971	1968	1969	1970	1971	1968	1969	1970	1971
	Cents per pound											
January	8.8	7.6	6.9	7.7	24.5	-	28.3	42.0	14.1	10.0	11.2	11.8
Feburary	10.2	9.8	11.0	10.7	25.0	27.0	28.0	43.0	10.1	10.3	12.0	11.5
March	13.4	7.9	18.6		25.0	27.0	28.6		11.9	9.3	11.2	
April	12.1	9.0	13.5		26.5	27.0	29.9		6.2	5.6	10.0	
May	9.7	12.7	11.1		26.5	28.0	29.0		5.8	6.2	6.4	
June	8.6	8.2	11.4		27.5	27.3	29.1		5.5	5.6	5.0	
July	8.0	7.4	11.2		27.5	26.8	33.0		6.0	8.9	7.5	
August	7.2	8.6	14.8		27.5	27.5	34.0		8.1	5.9	8.9	
September	6.8	7.8	11.6		27.0	28.0	34.0		6.4	7.0	8.3	
October	7.8	8.5	8.5		27.5	28.0	35.5		8.8	8.3	7.1	
November	7.0	8.4	7.7		27.5	28.0	37.0		9.4	11.0	7.8	
December	7.6	5.7	7.3		27.0	28.0	42.0		11.8	9.0	8.3	
Average	8.9	8.5	11.1		26.6	27.5	32.4		8.7	8.3	8.6	

1/ At Boston.
2/ Fillets, Canadian 5-lb. package, New York City Fulton Market.

Consumption Increases

In 1970, 10.9 million pounds of pollock fillets were consumed, a fourth greater than in 1969, and better than a third above the 1965-69 average. Seasonal patterns of consumption held true last year, with the heaviest amounts being consumed in the first and fourth quarters when supplies are heaviest.

A secondary influence on pollock consumption has been domestic market expansion activities, especially in the institutional markets *(hospitals, schools, restaurants, etc.)*. During 1968-69 these activities may have stimulated some increase in demand for pollock fillets beginning in 1969 and continuing into 1970. Exporters of pollock fillets to the United States have been quick to recognize the higher prices for pollock and possible expanded markets; as a result, pollock fillets from Canada and, especially, Norway increased.

Outlook

Supplies

Total supplies of pollock fillets during January-June 1971 are expected to be 4.6 million pounds, 1.6 million pounds below the comparable period in 1970. Decreased imports may offset anticipated increases in landings.

Landings Expected To Rise

U.S. landings of pollock may be 1.0 to 1.5 million pounds for the first quarter of 1971, about 40 percent higher than 1970. Landings through February 20, 1971, were over 0.8 million pounds compared to 0.6 million for the same period last year. Second quarter landings are expected to be close to 0.5 million pounds, compared to 0.3 million in 1970. Exvessel prices can be expected to remain low while landings are heavier in the first quarter of the year.

Imports Expected To Decline

U.S. imports of pollock fillets are expected to total around one million pounds in the first quarter and decline seasonally to around 0.8 million pounds in the second quarter. Imports in 1970 were 2.3 million and 0.9 million pounds, respectively, in the first 2 quarters. The primary reason for an anticipated drop in pollock fillet imports is that exporters of pollock to the United States are now apparently utilizing their harvest mainly in the production of pollock blocks, in light of the scarcity of cod blocks.

Switch Away From Fillets Anticipated

The U.S. market for pollock blocks in the past 6 months has become increasingly attractive relative to the fillet market, primarily because of decreasing margins between pollock block and fillet prices. Fillet prices in March 1971 were only about a penny higher than block prices, compared to a 9-cent spread in July 1970.

As long as the block supplies are short, pollock fillet imports will probably continue to decline as wholesale prices of pollock blocks remain relatively more attractive.

As with haddock, imports of pollock may come more from Norway, Denmark, and Iceland than from Canada. Pollock landings in Canada during 1970 were a third below 1969, and their share of United States pollock fillet imports has consequently been decreasing.

Demand

Consumption May Drop

As imports of pollock fillets decline, apparent consumption in the United States likely will do the same. Consumption in January-June is expected to total about 4 million pounds, 29 percent below the 5.5 million pounds consumed in the first 2 quarters of 1970. This consumption level would leave cold storage holdings on July 1 of 0.7 million pounds, about even with July 1, 1970.

Table 14.-- Supplies and utilization of ocean perch, 1960-70

(fillet weight)

Year	Supplies						Utilization		
	Beginning stocks	Landings			Imports	Total	Ending stocks	Apparent consumption	
		Atlantic	Pacific	Total				Total	Per capita
	Million pounds								Pounds
1960	14.9	42.4	2.7	45.1	14.4	74.4	13.7	60.7	0.337
1961	13.7	39.6	3.7	43.3	18.7	75.7	13.0	62.7	.343
1962	13.0	37.2	5.2	42.4	19.5	74.8	13.5	61.4	.330
1963	13.5	32.5	7.1	39.6	21.6	74.6	16.3	58.3	.309
1964	16.3	26.8	6.3	33.1	22.9	72.4	15.4	57.0	.298
1965	15.4	25.3	8.5	33.8	25.7	74.9	12.2	62.7	.325
1966	12.2	24.4	6.7	31.1	41.6	84.9	17.9	67.0	.342
1967	17.9	21.4	6.2	27.6	36.3	81.8	18.0	63.8	.319
1968	18.0	18.7	3.8	22.4	50.4	90.9	19.7	71.2	.356
1969	19.7	17.3	4.3	21.6	64.2	105.5	16.4	89.1	.446
1/ 1970	16.4	16.6	3.7	20.3	54.0	90.7	21.1	69.6	.341

1/ Preliminary.

Pollock would appear to stand a better chance of competing for the U.S. institutional business left vacant by cod, both in terms of price and possible substitutability. As long as pollock blocks, however, are in high demand in the United States, supplies of pollock fillets will continue to be scarce. Despite industry efforts in 1969 to stimulate demand for pollock fillets, this species is still expected to constitute only a small percentage of the North Atlantic groundfish fillet market.

OCEAN PERCH

Review

Supplies

Total supplies of ocean perch in 1970 were 90.7 million pounds (fillet weight), 14 percent below 1969 but 4 percent above the most recent 5-year average (table 14). Total supplies of ocean perch in the United States have trended upward since 1964 but dropped off significantly in 1970, primarily because of a decline in imports.

Landings Down

Domestic landings continued their long-term downward trend. U.S. landings of ocean perch in 1970 were 20.3 million pounds (fillet weight), 6 percent below the previous year, but 26 percent below the 1965-69 average. In October-December, landings were the lowest of any quarter in the past 6 years—3 million pounds.

Canadian landings of ocean perch were 61.8 million pounds (fillet weight), slightly below the 62.5 million pounds landed the year before.

Imports Drop

Imports of ocean perch fillets—95 percent Canadian—were 54 million pounds in 1970, 16 percent below 1969. Fourth quarter imports showed the sharpest decline. They were 14.3 million pounds, 28 percent below fourth quarter 1969. A sharp decline in domestic sales of ocean perch caused the drop in imports, leaving Canadian holdings of ocean perch fillets at the end of 1970 over 40 percent higher than they were in 1969.

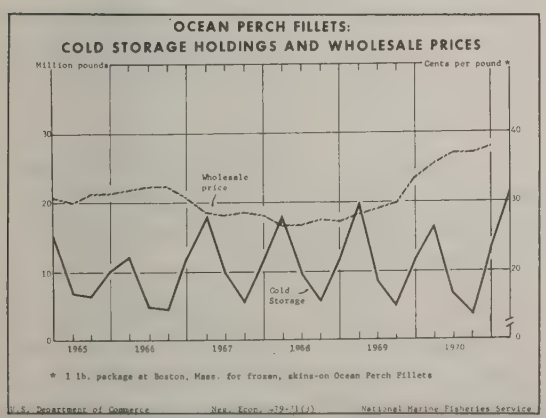
Table 15.-- Monthly exvessel, wholesale, and retail prices of ocean perch, 1968-71

Month	Exvessel price 1/				Wholesale price (fillets frozen) 2/				Retail price (fillets frozen) 3/			
	1968	1969	1970	1971	1968	1969	1970	1971	1968	1969	1970	1971
	Cents per pound											
January	3.6	3.8	5.0	5.4	27.5	28.5	35.5	37.5	54.4	54.6	59.4	69.1
February	3.6	3.8	4.6	5.1	26.5	28.5	35.5	37.5	54.6	53.8	61.3	70.9
March	3.7	3.8	4.6		26.5	27.5	35.5		53.7	53.8	61.6	
April	3.9	3.9	4.5		26.5	29.0	36.5		53.6	54.2	63.2	
May	3.8	4.0	4.5		27.0	29.0	37.5		53.8	54.7	63.3	
June	4.0	4.3	4.9		27.0	29.0	37.0		53.8	55.3	63.8	
July	4.0	4.4	5.2		28.0	29.5	37.0		54.6	55.4	64.0	
August	4.0	4.4	5.4		27.5	30.0	37.0		54.3	56.2	65.7	
September	4.0	4.4	5.4		27.3	30.0	37.0		50.8	57.0	65.6	
October	3.9	4.4	5.4		27.0	32.0	38.5		54.8	57.5	56.3	
November	3.9	4.6	5.5		27.0	34.0	38.5		54.5	57.8	66.6	
December	3.8	4.3	5.5		28.0	35.0	37.5		54.5	58.4	68.5	
Average	3.8	4.2	5.0		27.1	30.2	36.9		53.9	55.7	63.2	

1/ Weighted average at principal New England ports.
2/ Skins on, 1-lb. package, at Boston.
3/ Bureau of Labor Statistics 46-city U.S. average price.

Record Holdings at End of 1970

Inventories of ocean perch fillets in the United States were 21.1 million pounds at the end of 1970, 29 percent above 1969 ending stocks and 26 percent above the most recent 5-year average (fig. 14). These represented the highest level of ocean perch fillet inventories since 1957.



Demand

Wholesale and Retail Prices Rise

Both wholesale and retail prices for ocean perch fillets increased considerably in 1970 over the previous year. Wholesale prices (1-lb. skins-on-Boston) averaged 36.9 cents per pound—22 percent higher than the 1969 price of 30.2 cents and 24 percent above the 1965-69 average (table 15).

In the last quarter of 1970, wholesale prices averaged only 12 percent above 1969, compared to 25 to 30 percent higher earlier in the year.

Retail prices of ocean perch fillets, as reported by the Bureau of Labor Statistics, averaged 63.2 cents per pound, a 13-percent jump over the year before. After a steady climb since the first of 1969, retail prices weakened slightly in the last 3 months of 1970, probably because of heavy inventories.

Consumption Down Markedly

Consumption of ocean perch fillets declined sharply in 1970 to 69.6 million—22 percent below 1969 (an unusually heavy sales year for ocean perch). In the fourth quarter of 1970, however, consumption was only 10.6 million pounds. This consumption was the lowest for any quarter on record.

With inventories of ocean perch very high on January 1, 1971, prices at high levels and consumption in the fourth quarter of 1970 very low, preference for alternate groundfish species, especially by institutional users was fairly evident. It would appear that ocean perch consumption is, as a rule, closely tied to the Lenten season (first quarter)—more so than cod, flounder, etc. Evidence of this is indicated by the sharp decline in ocean perch consumption from the first to the second quarter, especially in recent years.

Outlook

Supplies

We expect that total supplies of ocean perch during the first half of 1971 will be about 55 million pounds (fillet weight), about a third higher than 1970. Landings will probably be lower in the first half of 1971 but will be more than offset by the record inventories on hand at the first of the year.

Landings May Decline

Domestic landings of ocean perch probably will continue their downward trend in 1971. First quarter landings of ocean perch are expected to be a little over 2 million pounds (fillet weight), considerably lower than in 1970. Second quarter landings increase seasonally and are expected to total slightly over 5 million pounds, almost even with the comparable 1970 period.

Imports Continue Growth

Imports of ocean perch fillets, almost all from Canada, are expected to continue their long-term growth rate in 1971. Imports are usually heaviest from Canada in the first quarter because of retailers' preparation for the Lenten period, and the third quarter because of the heavy Canadian landings season.

Imports in January 1971 were 7.6 million pounds—38 percent higher than in January 1970. Imports of ocean perch fillets during the first quarter of 1971 are expected at about 15 million pounds, and second quarter imports at about 11 million pounds—both substantially higher than in 1970.

Holdings Declining

After cold storage holdings of 21.1 million pounds on January 1, 1971, ocean perch holdings have declined steadily. By March 1, 1971, inventories of ocean perch fillets were 15.2 million pounds, a third higher than last year, and April 1 holdings are expected at about 9 million pounds.

Demand

Wholesale Prices Stable—Consumption May Increase

The wholesale price of ocean perch fillets has remained stable in the first 2 months of 1971. Given current wholesale prices, consumption of ocean perch fillets is expected to be about 28 to 29 million pounds during the first quarter of 1971, 19 percent higher than the first quarter of 1970. Sales may be around 20 million pounds in the second quarter, 38 percent higher than the 14.4 million pounds consumed last year.

Primary reasons for greater consumption are high inventories, more imports, and a general trend toward greater consumption of ocean perch in the face of scarcity of other groundfish.

It appears that ocean perch fillets will not be able to penetrate the market for "white-fleshed" fillets in the near future. This includes the burgeoning fish and chip outlets and convenience, fast-food drive-ins. There are still, however, substantial markets for ocean perch on both the institutional and retail food chain fronts, as a "good protein buy."

HALIBUT

Review

Supplies

Supplies of halibut in 1970 totaled 68.7 million pounds (dressed weight), a slight decrease from 1969 supplies of 70.7 million pounds and 7 percent below the average for the previous 5 years (table 16). Supplies, however, were high in view of the reduced quota on halibut landings for 1970.

U.S. Landings Up Slightly

Landings of halibut in the United States were 26.1 million pounds—up 1.1 million from 1969, but 1.0 million less than the 1965-69 average. U.S. landings increased despite a reduction in the quota established by IPHC (International Pacific Halibut Commission) from 55.5 million in 1969 to 53 million pounds in 1970. This increase in landings was at the expense of Canadian landings. In 1970, Canadian vessels landed 29.2 million pounds of halibut, down 4 million pounds from 1969. Total landings by United States and Canadian vessels exceeded the quota slightly because some halibut were caught in unrestricted areas.

Halibut landings were heaviest in central Alaska ports near the fishing grounds. These landings were 14.3 million pounds, up 72 percent from 1969 central Alaska landings. Halibut landings of 8.7 million pounds in Kodiak made it the number one U.S. halibut port with 34 percent of the total U.S. landings. These increased Alaska landings were partially at the expense of Seattle which reported an all-time low of 3.9 million pounds.

Imports—Down in 1970

Imports into the United States fell in 1970 to 27.7 million pounds, down 4 million from the high level in 1969. Most of this drop was caused by decreased imports from Canada. Canadian shipments were lower due to lower landings by Canadian vessels. Imports from Japan decreased slightly and imports from Norway ceased.

Holdings—High in 1970

U.S. holdings in 1970 were consistently higher than in comparable periods in 1969. End-of-year holdings of 17.0 million pounds were slightly lower than the most recent 5-year average of 17.2 million pounds, but were up from

Table 16.-- Supplies and utilization of Pacific halibut, 1960-70 1/

(dressed weight)

Year	Supplies				Utilization		
	Beginning stocks	Landings	Imports	Total	Ending stocks	Apparent consumption	
						Total	Per capita
	Million pounds						Pounds
1960	18.9	38.3	28.6	85.8	14.4	71.3	0.396
1961	14.4	40.0	28.2	82.7	13.8	68.9	.376
1962	13.8	40.4	34.9	89.0	22.6	66.5	.357
1963	22.6	34.3	29.4	86.3	25.4	60.9	.323
1964	25.4	26.3	30.3	82.0	15.8	66.3	.346
1965	15.8	30.4	30.0	76.2	17.4	58.8	.304
1966	17.4	30.4	27.4	75.2	20.7	54.5	.278
1967	20.7	30.1	24.1	74.9	19.3	55.6	.281
1968	19.3	19.4	29.7	68.4	13.7	54.7	.274
1969	13.7	25.0	31.8	70.5	14.9	55.6	.276
2/ 1970	14.9	26.1	27.7	68.7	17.0	51.7	.254

1/ Data were adjusted downward to correct for Greenland turbot that was classified as halibut.
2/ Preliminary.

Table 17.-- Monthly exvessel, wholesale, and retail prices of Pacific halibut, 1968-71

Month	Exvessel price 1/									Wholesale price 2/				Retail price 3/			
	Seattle			Ketchikan			Prince Rupert										
	1968	1969	1970	1968	1969	1970	1968	1969	1970	1968	1969	1970	1971	1968	1969	1970	1971
	Cents per pound																
January	-	-	-	-	-	-	-	-	-	39.0	41.3	57.5	54.2	88.1	86.0	106.0	106.5
February	-	-	-	-	-	-	-	-	-	34.5	41.3	57.5	54.2	87.5	91.5	102.5	107.8
March	-	-	-	-	-	-	-	-	-	34.5	43.0	56.5		91.5	90.3	101.9	
April	27.2	35.4	43.4	-	-	-	22.6	-	-	34.5	47.0	57.5		93.2	86.6	113.8	
May	24.8	36.9	40.1	20.0	29.3	35.5	24.4	36.7	39.4	34.3	47.0	57.5		92.7	91.8	116.0	
June	25.1	39.2	43.0	19.8	34.5	39.1	22.7	40.9	42.6	37.2	58.0	57.5		92.2	98.5	112.8	
July	25.7	43.4	44.4	20.5	37.5	39.2	22.9	43.3	42.5	39.4	62.0	57.5		89.5	103.5	110.0	
August	27.4	45.3	39.8	21.0	46.0	37.3	-	45.3	38.9	41.6	62.0	57.0		89.8	106.5	108.0	
September	29.0	42.4	34.9	-	38.5	-	-	44.1	35.6	40.6	66.0	57.3		88.0	101.0	112.8	
October	25.8	43.5	32.5	-	-	-	-	43.7	31.7	45.2	60.0	56.7		89.1	100.1	108.3	
November	33.7	43.3	35.6	-	-	-	-	-	-	38.5	63.0	55.3		93.0	123.8	106.6	
December	-	-	-	-	-	-	-	-	-	39.0	58.0	54.9		89.0	104.0	106.0	
Average	28.3	41.2	39.2	20.3	37.2	37.8	23.2	42.3	38.5	38.2	54.1	56.9		90.3	98.6	108.6	

1/ Weighted average price for medium size.
2/ Dressed form, frozen, at New York, N.Y.
3/ Steak form, fresh at New York, N.Y.

December 31, 1969 holdings of 14.9 million pounds. The level of holdings in 1970 was relatively high compared with the previous 2 years, because of an increased U.S. catch and lower consumption in 1970. Holdings in Canada were about normal for most of the year, but ended the year toward the high side.

Demand

Wholesale and Retail Prices—Both Up

Wholesale prices in 1970 were strong throughout most of the year but weakened in fourth quarter (table 17). Nevertheless, the average for the year—56.9 cents per pound—was 3.6 percent higher than the 1969 average.

Retail prices for halibut (New York City), reached record highs in 1970, increasing 10.1 percent over 1969 to an average of $1.09 per pound. Retail prices dropped in the fourth quarter of 1970, ending the year at the same level as the beginning of the year.

Consumption—Low in 1970

Consumption of halibut in 1970 was 51.7 million pounds, 4.1 million pounds less than the level in 1969 and the lowest in many years. This decrease in consumption was greater than would be expected from the quota restrictions and was probably caused by consumer resistance to higher retail prices. Only 75 percent of halibut supplies were consumed compared to 79 percent in 1969 and 77 percent for 1965-69. This weakness in consumption resulted in the higher holdings of halibut at the close of 1970.

Outlook

Supplies

Total supplies of halibut in 1971 probably will be slightly higher than in 1970, because inventories were higher on January 1, 1971. Landings and imports, however, are expected to remain unchanged.

Landings—1971 Quota Lowered by Half Million Pounds

The quota recommended by IPHC for 1971 is essentially the same as the 1970 quota. The quota will probably be filled well before the close of the season in November. Total landings will probably be slightly above the quota because some catch will come from unrestricted areas. Landings by U.S. vessels will probably not vary greatly from the 47 percent of combined landings (United States and Canada) in 1970.

Holdings—Drop Sharply in Early 1971

During January and February, halibut holdings dropped 7.3 million pounds from 17.0 to 9.7 million pounds, a decrease of 43 percent. This decrease left inventories at the end of February at near-normal levels. Thus, in 2 months the situation in inventories changed from unusually high to near normal. It is possible that some of this unusual drop can be attributed to increased consumption caused by a switch from swordfish to halibut. Swordfish consumption in past years has been about 25 to 26 million pounds. But in early 1971, supplies of swordfish were held in warehouses but unavailable to consumers due to high mercury levels for that species. Halibut is very similar to swordfish in appearance and texture and is usually prepared in a similar manner, thus, halibut is a likely substitute for curtailed swordfish consumption. Another factor that could account for part of the decreased inventories was intensive promotion of halibut in early 1971.

Because of the experience in January, and February, we expect that little halibut will be in cold storage at the start of the 1971 fishing season. Holdings will reach their seasonal low in April and build to the end of the season in October or November.

Demand

Consumption—Higher in 1971

Consumption of halibut was very high in January and if the speculation regarding consumers switching from swordfish is correct, then consumption will probably be high all year but will be constrained by landings. Consumption for 1971 is estimated at 58 million pounds.

Prices—Firm Market Expected

Retail prices for halibut steaks advanced slightly in January and February to $1.08. With consumption of halibut expected to be higher and with a limited catch, prices at all levels are expected to be higher than last year. The recent decline in inventories could trigger a round of price increases; however, extremely sharp price rises might cause some consumer resistance.

WHITING

Review

Supplies

Total supplies of headless and dressed whiting were 26.6 million pounds in 1970, 20 percent under 1969 and only half the 1965-69 average. Lower landings and cold storage holdings more than offset an influx of imports during the summer of 1970.

Landings Continue Down

Domestic landings of whiting were 28.1 million pounds (round weight) in 1970, (17.1 million pounds, headless and dressed weight) 16 percent below 1969 and a fourth below the 1965-69 average. Landings have dropped steadily since 1966. While domestic landings declined, the value of the catch increased from $1.9 million in 1969 to $2.4 million in 1970.

Imports Up Sharply

In 1970, over 6 million pounds of headless and dressed whiting, were imported from Argentina and South Africa. They were attracted by a sharp increase in domestic wholesale prices of

Table 18.-- Cold storage holdings of headless and dressed whiting

Beginning of month	1965-69 average	1969	1970	1971	1970 % change from 1965-69	1970 % change from 1969	1971 % change from 1966-70	1971 % change from 1970
	Million pounds				Percent			
January	12.5	12.8	2.0	10.8	-84	-86	+1	+440
February	9.7	10.0	1.4	9.6	-85	-86	+17	+586
March	7.0	7.5	1.0	8.3	-86	-87	+41	+730
April	4.3	4.6	.6		-87	-87		
May	2.9	2.9	.7		-76	-76		
June	2.2	2.2	1.5		-32	-32		
July	3.1	2.9	2.4		-24	-17		
August	10.2	5.8	6.7		-34	+16		
September	14.6	6.3	10.5		-28	+67		
October	15.0	4.6	12.1		-19	+161		
November	14.0	3.7	12.0		-14	+224		
December	12.2	2.6	11.7		-4	+350		

headless and dressed whiting. Before 1970, whiting was imported mainly as blocks.

The wholesale price of imported whiting (5-pound package) in the summer of 1970 averaged 21 to 23 cents per pound, about 5 cents lower than the domestic product. By January 1971, domestic prices had decreased to 20-23 cents per pound, but imported whiting prices remained 5 cents lower.

Holdings Increase During 1970

Cold storage holdings of headless and dressed whiting remained a good deal below 1969 for the first half of 1970. With the influx of lower priced imports in the summer, however, holdings began to build. By March 1971, inventories were 40 percent higher than normal levels (table 18).

Demand

Exvessel and Wholesale Prices Up

Exvessel prices in 1970 during the heavy harvest season—May-September—were 8.5 to 9 cents per pound, 2 to 4 cents a pound higher than in 1969. These higher prices were, for the most part, offered to fishermen when processors were anticipating a very light landing season in 1970. Wholesale domestic prices for headless and dressed whiting (5-lb package) climbed steadily from July 1968 when they were 11 cents to a July-September 1970 average of 26 to 28 cents per pound (table 19).

Consumption Declines

Consumption of headless and dressed whiting was 14.4 million pounds in 1970—less than half that of 1969 and 64 percent below the most recent 5-year average (table 20). A large part of declining sales was due to lower available supplies, and substantial price increases of headless and dressed whiting, especially in the summer of 1970. Rising incomes and changing tastes and preferences may also account in part for the long-run decline in whiting sales.

Table 19.-- Wholesale prices of headless and dressed whiting July-December, 1968-70

Month	1968	1969	1970		
	1/ United States	1/ United States	1/ United States	1/ Argentina	2/ South Africa
July	11.7	16.7	26.1	21.9	22.2
August	11.5	18.6	27.0	22.0	22.2
September	12.2	23.0	26.5	22.0	22.4
October	12.8	24.4	25.5	21.9	23.8
November	13.1	27.1	24.0	21.5	23.8
December	14.1	-	24.0	-	-

1/ #5 lb. packages.
2/ #30 lb. packages.
Source: Boston market news reports.

Table 20.-- Supplies and utilization of headless and dressed whiting, 1965-70

Year	Supplies				Utilization		
	Beginning stocks	Landings	Imports	Total	Ending stocks	Apparent consumption	
						Total	Per capita
	Million pounds						Pounds
1965	11.4	46.3	-	57.7	9.0	48.7	0.253
1966	9.0	54.8	-	63.8	16.6	47.2	.244
1967	16.6	42.8	-	59.4	12.9	46.5	.238
1968	12.9	43.3	-	56.2	12.8	43.4	.217
1969	12.8	20.4	-	33.2	2.0	31.2	.155
1/ 1970	2.0	17.0	6.2	25.2	10.8	14.4	.076

1/ Preliminary.

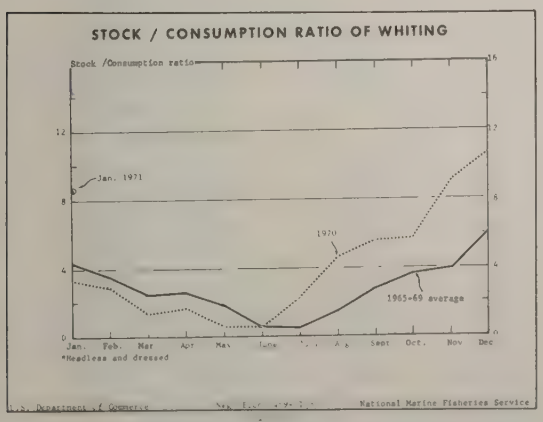
Stock—Consumption Ratio Up

The ratio of stocks to consumption is often an indicator of the degree of efficiency with which production is moving through distribution channels. Beginning in July 1970, stock consumption ratios for headless and dressed whiting were unusually high (fig. 15). In January 1971, the ratio stood at 8.6, almost double the average January ratio of 4.4.

Outlook

Supplies

Total supplies of headless and dressed whiting will probably be lower in 1971, perhaps close to 20 million pounds, compared to 26.6 million in 1970. Probable reasons include lower landings and less imports of headless and dressed whiting.



Landings Down Slightly

Biologists' predictions for whiting resources point to continued poor abundance north of Georges Bank for 1971. This area will most probably continue to be overfished. South of Georges Bank, the abundance appears to be greater. However, whether landings in the South will offset the decline in the North is uncertain. Overall, we expect that landings may drop slightly continuing their trend of the past 5 years.

Imports May Also Decline

Imports of headless and dressed whiting will depend on U.S. wholesale price levels. Prices as of March 1971 were still dropping. Argentina and South Africa have been able to continually price their headless and dressed whiting below the domestic price. Given current (March) price differentials between imported headless and dressed whiting (18 cents) and blocks (28-30 cents), exporters may begin to shift back to whiting blocks, especially if U.S. supplies of blocks remain scarce.

Demand

Stock-Consumption Ratio Down—But Total Consumption May Also Decline

With the prospects for lower available supplies of headless and dressed whiting during 1971, the stock-to-consumption ratio whould also begin to move back in line with previous averages.

Total consumption, however, at least of whiting in the headless and dressed form, may continue to decline, because of; (1) lower level of supplies and (2) changing tastes and preferences, as consumer income rises.

SALMON

Review

Supplies

Supplies Down in First Half of 1970

Total supplies of canned salmon during the first 6 months of 1970 were 2.2 million standard cases, 22 percent below the first half of 1969 (2.8 million).

Canners' inventories were 1.8 million standard cases on January 1, 1970, 24 percent below the previous year. Distributors' inventories were down slightly.

High Consumption Clears Out Inventories

Canners apparently anticipated biologists' predictions for an unusually large salmon pack for the 1970 season and swiftly moved their stocks with the help of relatively low prices. The high interest rates during the first 6 months of 1970 also made canners reluctant to finance and carry large inventories.

A comparatively small 1969 pack of 2.5 million cases (1965-69 average was 3.2 million) also helped to keep total supplies relatively low in the latter part of 1969 and the first half of 1970.

Landings Up 58 Percent—More to Fresh and Frozen Markets

Salmon landings in 1970 were 389.3 million pounds (round weight), compared with the 246.2 million pounds landed in 1969. Since 1960, the proportion of salmon landings marketed in the fresh and frozen form has gradually increased. Improvements in transportation facilities from Alaska, particularly air shipments, has enabled more fresh and frozen salmon to be transported to major market areas in the United States. Table 21 indicates the declining proportion of salmon landings being canned.

Canned Salmon Pack Large —But Not a Record

Biologists at the beginning of 1970 were predicting a very large salmon run for the June-July 1970 season and an estimated pack of 5.6 million cases, highest since 1941. The pack in 1970 did not reach the record high anticipated, although it was quite large—3.9 million standard cases—

Table 21.-- Salmon pack, 1960-70

Year	Total salmon landings	Total pack pounds	Percent of landings canned
	----- 1,000 pounds 1/ -----		
1960	235,447	206,794	87.8
1961	310,398	269,713	86.9
1962	314,566	277,302	88.2
1963	294,177	240,393	81.7
1964	352,246	274,271	77.9
1965	326,806	265,108	81.1
1966	404,800	317,924	78.5
1967	218,233	151,198	69.3
1968	327,700	251,544	76.8
1969	246,200	183,841	74.7
1970	389,300	287,069	73.7

1/ Round weight.

Table 22.-- Salmon pack by species, 1965-70

Species	1965	1966	1967	1968	1969	1970 1/	Percent change of '70 over 1969	Percent change of '70 over '65-'69	Average percent '65-'69
	1,000 standard cases						Percent		
King	131.6	83.7	91.4	70.2	71.7	50.1	-30	-44	2.9
Chum	320.6	611.3	360.3	654.5	183.8	486.1	+164	+14	13.3
Pink	949.9	2,068.6	616.5	1,841.6	1,299.3	1,337.8	+3	-1	41.7
Red	2,041.2	1,385.5	863.2	714.6	902.6	1,919.7	+113	+62	37.2
Coho	186.2	205.5	138.9	163.9	59.4	140.7	+137	-7	4.7
Steelhead	3.7	2.9	2.0	2.8	3.0	.2	-93	-93	.1
Total	3,633.6	4,357.5	2,072.3	3,447.6	2,519.8	3,934.6	+56	+23	100.0

1/ Preliminary.

56 percent over 1969, and 23 percent over the 1965-69 average of 3.2 million cases (table 22). The red salmon pack, predicted at 2.8 million cases, was actually 1.9 million cases, still more than double the 1969 red salmon pack. The pink salmon pack was 1.3 million cases, about a million cases below expectation.

Red salmon accounted for 49 percent of the pack in 1970; pinks 34 percent (table 23).

Alaska continued to dominate the salmon industry, with 93 percent of the pack in 1970 (tables 24 and 25).

Table 23.-- Percent of salmon pack, by species, 1965-70

Specie	1965	1966	1967	1968	1969	1970
	Percent					
King	3.6	1.9	4.4	2.0	2.8	1.3
Chum	8.8	14.0	17.4	19.0	7.3	12.4
Pink	26.1	47.5	29.7	53.4	51.6	34.0
Red	56.2	31.8	41.7	20.7	35.8	48.8
Coho	5.1	4.7	6.7	4.8	2.4	3.6
Steelhead	.1	.1	.1	.1	.1	-
Total 1/	100.0	100.0	100.0	100.0	100.0	100.0

1/ Figures may not add to total because of rounding.

Table 24.-- Salmon pack by region, 1960-70

Year	Wash. & Oregon	Percent of total	Alaska	Percent of total	Total cases
	1,000 std. cases	Percent	1,000 std. cases	Percent	1,000 std. cases
1960	263	9.3	2,571	90.7	2,834
1961	489	13.2	3,212	86.8	3,697
1962	326	8.6	3,475	91.4	3,801
1963	639	19.4	2,655	80.6	3,294
1964	210	5.6	3,550	94.4	3,760
1965	366	10.1	3,268	89.9	3,634
1966	367	8.4	3,990	91.6	4,357
1967	608	29.3	1,464	70.7	2,072
1968	210	6.1	3,238	93.9	3,448
1969	268	10.6	2,252	89.4	2,520
1/1970	259	6.6	3,676	93.4	3,935

1/ Preliminary.

Table 25.-- Alaska salmon pack by region and as percentage of total, 1965-70

Year	Western	Central	Southeast	Total
	Standard cases			
1965	1,538,500	975,000	764,900	3,278,400
1966	893,372	1,480,886	1,560,803	3,935,061
1967	424,219	608,576	431,155	1,463,950
1968	359,158	1,437,055	1,371,914	3,168,127
1969	496,723	1,471,866	308,433	2,277,022
1/ 1970	1,257,105	1,736,305	682,609	3,676,019
	Percent of total			
1965	46.9	29.8	23.3	100.0
1966	22.7	37.6	39.7	100.0
1967	29.0	41.6	29.4	100.0
1968	11.3	45.4	43.3	100.0
1969	21.8	64.6	13.6	100.0
1/ 1970	34.2	47.2	18.6	100.0

1/ Preliminary.

Supplies Up in Second Half of 1970

Total supplies of canned salmon in the last 6 months of 1970 were 4.5 million cases, but were not unusually high despite the large pack, mainly because of very low inventories on July 1. More importantly, canners' July 1 inventories represented only around 5 percent of total available supplies in the last 6 months of 1970, compared to the usual 20 percent (fig. 16). During November and December 1970, and January 1971, inventories of canned salmon continued relatively low.

Because of the large run of reds at Bristol Bay, canners held a larger portion of red salmon during June-December 1970 (45 to 50 percent) than in 1969 and the first part of 1970 (15 to 20 percent).

Demand

Consumption Up in First Half of 1970

Despite a 22-percent decrease in available supplies of canned salmon during January-June 1970, apparent consumption increased to 1.5 million standard cases, 6 percent more than the 1.4 million cases consumed during January-June 1969 (table 26). The increase was possible because inventories were reduced to very low levels prior to the new canning season.

While consumption was on the rise, prices increased slightly in the first half of the year (table 27). Wholesale prices for reds (48 1-lb. talls) for January-June averaged $45.45 per case, 11 percent over 1969. Pinks during the first half of the year averaged $32.14 per case, 1 percent over 1969. Thus, with a rising price level and increased consumption, demand for canned salmon rose in the first half of 1970.

Prices Steady in Second Half—Consumption Increases

Wholesale prices of canned salmon, for the most part, remained steady in the second half of 1970, with the exception of red salmon. Relatively heavy supplies of reds during the latter part of 1970 caused a slight weakening of price, while prices of pinks, in shorter supply, were firmer. Shipments during July-October were about a third of total quantity available, about the same as in 1969 (table 28).

Apparent consumption during July-December 1970 was 1.7 million standard cases, 13 percent higher than the first half of 1970, and 21 percent above the second half of 1969.

Fresh and Frozen Market Growing

The market for fresh and frozen salmon in the United States has been expanding since 1960, and at a more rapid pace since 1966. Whereas 88 percent of total salmon landings was canned in 1966, an estimated 74 percent was canned in 1970. Most of the remaining salmon were sold as salmon steaks.

Much of troll-caught king salmon in Washington and Oregon, and an increasing percentage of red and pink salmon from Alaska are sold as steaks. Several factors have given impetus to this trend. Among these are:

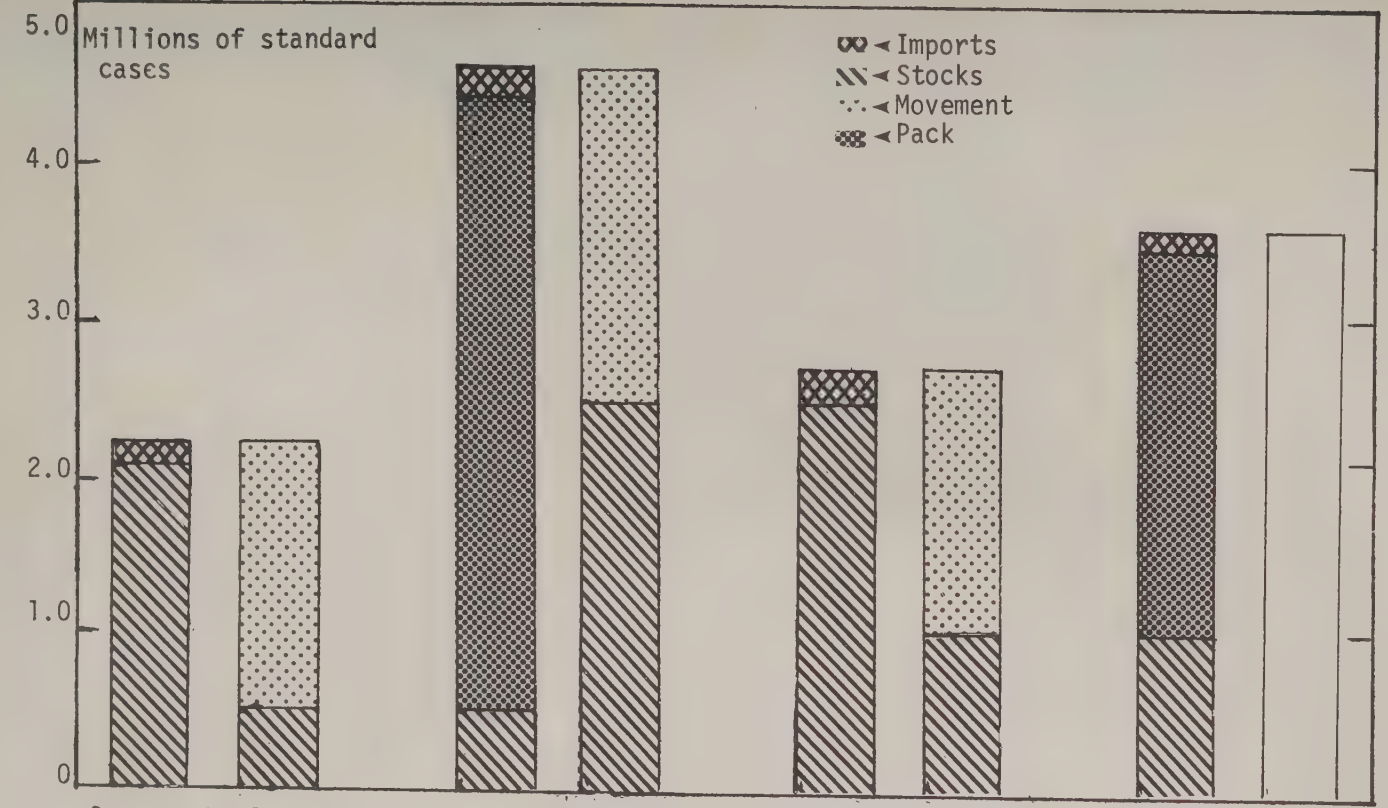
(a) Higher gross margins available to both processors and retailers in the handling of fresh and frozen salmon steaks.

(b) Improved transportation from Alaska, with more attractive rates available to shippers.

Exports of Canned Salmon Up—Fresh and Frozen, Down

Exports of canned salmon in 1970 were 16.8 million pounds, product weight, an 18-percent increase over 1969. Of the 16.8 million pounds exported, 8.4 million pounds were shipped to the United Kingdom.

SUPPLIES AND UTILIZATION OF CANNED SALMON



*Estimated.

Stocks--Canners and distributors.
Movement--Apparent consumption and exports.

U.S. Department of Commerce Neg. Econ. 463-71(2) National Marine Fisheries Service

Figure 16

Table 26.-- Supplies and utilization of canned salmon in the United States, 1965-70

Year / Species	Supplies					Utilization				
	Beginning stocks		Production	Imports	Total	Ending stocks		Exports	Apparent consumption	
	Canners	Distributors				Canners	Distributors		Total	Per capita
	Thousand standard cases									Pounds
1965-1st half										
King	47.9									
Red	376.3									
Coho	116.9									
Pink	1,634.0									
Chum	674.9									
Total	2,850.0	N.A.		0.1	2,850.1	733.7	499.2	229.2	1,388.0 (66.62 mil. lbs.)	0.347
1965-2d half										
King	13.5		131.6							
Red	54.8		2,041.2							
Coho	49.8		186.5							
Pink	364.2		950.0							
Chum	251.4		320.6							
Steelhead			3.7							
Total	733.7	499.2	3,633.6	1.8	4,868.3	2,259.8	501.1	289.4	1,818.0 (87.26 mil. lbs.)	.454
1966-1st half										
King	59.5									
Red	1,316.7									
Coho	91.2									
Pink	554.5									
Chum	237.9									
Total	2,259.8	501.1		11.2	2,772.1	743.1	377.9	218.5	1,432.6 (68.76 mil. lbs.)	.355
1966-2d half										
King	20.4		83.7							
Red	626.2		1,385.5							
Coho	20.3		205.5							
Pink	58.0		2,068.6							
Chum	18.2		611.3							
Steelhead			2.9							
Total	743.1	377.9	4,357.5	0.7	5,479.2	2,991.4	464.9	208.2	1,814,7 (87.11 mil. lbs.)	.450
1967-1st half										
King	51.3									
Red	1,301.4									
Coho	106.8									
Pink	1,268.3									
Chum	263.6									
Total	2,991.4	464.9		1.2	3,457.5	1,253.0	399.6	285.7	1,519.2 (72.92 mil. lbs.)	.373
1967-2d half										
King	26.0		91.4							
Red	603.7		863.2							
Coho	54.2		138.9							
Pink	472.5		616.5							
Chum	96.6		360.3							
Steelhead			2.0							
Total	1,253.0	399.6	2,072.3	1.1	3,726.0	1,666.4	421.0	142.3	1,496.3 (71.82 mil. lbs.)	.367
1968-1st half										
King	63.1					35.6				
Red	876.0					443.9				
Coho	84.2					30.4				
Pink	435.9					104.1				
Chum	207.2					56.9				
Total	1,666.4	421.0		96.3	2,183.7	671.0	316.0	58.2	1,138.5 (54.65 mil. lbs.)	.274

Table 26.-- Supplies and utilization of canned salmon in the United States, 1965-70 (continued)

Year / Species	Supplies: Beginning stocks: Canners	Supplies: Beginning stocks: Distributors	Supplies: Production	Supplies: Imports	Supplies: Total	Utilization: Ending stocks: Canners	Utilization: Ending stocks: Distributors	Utilization: Exports	Utilization: Apparent consumption: Total	Utilization: Apparent consumption: Per capita
	Thousand standard cases									Pounds
1968-2d half										
King	35.6		70.2			56.7				
Red	443.9		714.6			638.3				
Coho	30.4		163.9			104.0				
Pink	104.1		1,841.6			1,035.1				
Chum	56.9		654.5			478.0				
Steelhead			2.8							
			1/							
Total	671.0	316.0	3,447.7	7.0	4,441.6	2,312.1	434.0	61.1	1,634.4 (78.45 mil. lbs.)	.390
1969-1st half										
King	56.7					20.0				
Red	638.3					141.8				
Coho	104.0					42.7				
Pink	1,035.1					429.0				
Chum	478.0					242.2				
Total	2,312.1	434.0		31.5	2,777.6	875.8	433.0	72.9	1,395.9 (67.00 mil. lbs.)	.331
1969-2d half										
King	20.0		71.7			41.3				
Red	141.8		902.6			458.6				
Coho	42.7		59.4			46.3				
Pink	429.0		1,299.3			984.2				
Chum	242.2		183.8			226.7				
Steelhead			3.0							
			1/							
Total	875.8	433.0	2,519.8	18.8	3,847.4	1,757.1	406.0	250.8	1,433.5 (68.81 mil. lbs.)	.341
1970-1st half 2/										
King	41.3					13.6				
Red	458.6					46.3				
Coho	46.3					13.9				
Pink	984.2					125.4				
Chum	226.7					43.9				
Total	1,757.1	406.0		15.4	2,178.5	243.1	324.3	127.4	1,483.7 (70.83 mil. lbs.)	.349
1970-2d half 2/										
King	13.6		50.1			30.4				
Red	46.3		1,919.7			1,018.4				
Coho	13.9		140.7			91.5				
Pink	125.4		1,337.8			740.6				
Chum	43.9		486.1			317.0				
Steelhead			.2							
Total	243.1	324.3	3,934.6	35.5	4,537.5	2,197.9	451.8	222.8	1,665.1 (79.92 mil. lbs.)	.389

1/ Excludes 670 standard cases for nonfood use.
2/ Preliminary
Sources: Division of Industry Statistics, National Canners' Association, and Department of Commerce.

Table 27.-- U.S. monthly wholesale prices of canned salmon, 1968-71

Month	Wholesale price 1/															
	Red (sockeye)				Pink				Chum				King (chinook)			
	1968	1969	1970	1971	1968	1969	1970	1971	1968	1969	1970	1971	1968	1969	1970	1971
	Dollars per case 2/															
January	40.00	40.50	45.25	41.50	32.50	29.70	31.60	33.50	29.00	27.00	28.80	29.50	34.00	34.00	36.50	37.50
February	40.00	40.50	45.44	41.50	32.50	30.00	31.25	34.50	29.00	26.75	28.25	30.00	34.00	34.00	37.13	37.50
March	40.00	40.63	45.50		32.80	30.00	32.50		29.30	26.50	28.50		34.00	34.00	37.00	
April	40.00	41.00	45.50		33.00	30.00	32.50		29.50	26.50	28.50		34.00	34.00	37.00	
May	40.00	41.00	45.50		33.00	30.00	32.50		29.50	26.50	28.50		34.00	34.00	37.00	
June	40.00	41.25	45.50		33.00	30.80	32.50		29.50	26.88	28.50		34.00	34.00	37.00	
July	40.00	43.30	42.90		33.00	32.40	32.50		29.50	28.50	28.50		34.00	34.00	37.00	
August	40.70	43.75	40.00		32.30	32.50	32.50		29.30	28.50	28.50		34.00	34.00	37.25	
September	41.00	44.13	40.00		31.00	32.50	33.50		28.50	28.50	28.50		34.00	35.00	37.50	
October	41.00	45.13	40.00		31.00	32.50	33.50		28.13	28.50	29.00		34.00	36.50	37.50	
November	40.50	45.25	41.13		30.00	32.50	33.50		27.38	28.88	29.50		34.00	36.75	37.63	
December	40.50	45.25	41.50		29.75	32.50	33.50		27.00	29.00	29.50		34.00	36.50	37.50	
Average	40.31	42.64	43.18		31.99	31.28	32.65		28.80	27.67	28.71		34.00	34.73	37.17	

1/ Average of the weekly prices reported by Seattle brokers and canners.
2/ Forty-eight one-pound talls. Does not include discounts and promotional allowances.

Table 28.-- Total supplies of canned salmon and monthly shipments as a percent of supplies by marketing years, 1965-66 through 1970-71

Year	Total pack	July 1 1/ stocks	Total	July-Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	Total
	Thousand standard cases												
July '65-June '66	3,633.6	733.7	4,367.3	38.0	3.1	5.0	7.9	9.8	6.9	3.2	2.9	4.0	80.8
July '66-June '67	4,357.5	743.1	5,100.6	28.6	6.6	5.9	7.5	7.5	4.4	5.7	4.8	4.2	75.2
July '67-June '68	2,072.3	1,253.0	3,325.3	35.8	4.8	8.2	6.4	6.2	5.6	7.2	4.6	3.4	82.2
July '68-June '69	3,447.7	671.0	4,118.7	30.3	5.8	7.4	4.0	8.6	8.0	3.5	5.0	6.5	79.1
July '69-June '70	2,519.8	875.8	3,395.6	34.2	8.5	6.3	9.4	10.7	11.8	3.8	4.9	4.0	93.6
July '70-June '71	2/ 3,934.7	243.1	2/ 4,177.8	33.2	8.3	4.7	6.3						

1/ Canners stocks only.
2/ Preliminary.
Source: Pack. Canned fishery products.
Stocks and shipments--Division of Industry Statistics, National Canners' Association.

Fresh and frozen salmon exports in 1970 totaled 28.2 million pounds, about 2.3 million pounds less than 1969, but around 10 million pounds more than was exported in 1967 and 1968. Exports to Japan dropped 6.4 million pounds. This drop was paritally offset by increases to Canada (1.8 million pounds) and France (1.2 million pounds).

Outlook

Supplies

Stocks Higher in First Half 1971—Smaller Pack Predicted for 1971

Canners' stocks of salmon on January 1, 1971, were 2.2 million cases, about a fourth higher than the low level on January 1, 1970. Stocks on hand on July 1 are usually dependent, to a large extent, upon the size of pack predicted for the coming season.

Biologists for the State of Alaska have predicted an Alaska pack of 2.5 million standard cases, 31 percent below 1970, and 14 percent below the 1966-70 average. Biggest predicted declines are for red and pink salmon—36 and 35 percent below last year (table 29).

Although the expected pack is below 1970, the Alaska Department of Fish and Game remains optimistic about the long-run future production of Alaskan salmon fisheries for several reasons, including: improved fish forecasting methods, recovery of earthquake-damaged production areas, and more encouraging runs of pink salmon in Kodiak and Southeastern Alaska.

If the Alaskan pack continues to represent around 95 percent of the total U.S. salmon pack, the estimated total pack for 1971 will be around 2.6 million standard cases, one-third below the 3.9-million-case pack in 1970.

Table 29.-- Predicted 1971 ALASKAN salmon pack--comparison with 1970, and 1966-70 average.

Species	1971 1/	1970	1970 as a percent of 1970	1966-70 average	1971 as a percent of 1966-70 average
	1,000 std. cases		- - - - Percent - - - -		
King	29	27	+77	31	-6
Red	1,152	1,795	-36	855	+35
Coho	67	56	+20	64	+5
Pink	861	1,327	-35	1,119	-23
Chum	420	472	-11	372	+13
Total	2,529	3,677	-31	2,441	+3

1/ Source: Alaska Department of Fish and Game.

Demand

Prices for Pinks May Edge Up—Reds May Hold Firm

Shorter than normal supplies of pink salmon in the latter part of 1970 and the beginning of 1971 indicate a possible slight rise in the wholesale price of pinks during the first half of 1971. Red salmon inventories on January 1, 1971 were only about 6 percent above the 1966-70 average. Because prices for canned salmon traditionally hold steady or edge up slightly during the first 6 months of the year, wholesale prices of reds likely will remain firm until the new pack begins in June.

Consumption May Be Up Slightly

If prices of red salmon remain about steady at current levels, prices of pinks rise slightly, and tuna prices do not change substantially, we estimate apparent consumption of canned salmon in the first half of 1971 at about 74 million pounds (1,540,000 standard cases). This estimate is 4 percent higher than consumption in the first half of 1970.

With expected canned imports of less than 4.8 million pounds (100,000 standard cases), and consumption of 74 million pounds, canners and distributors inventories on July 1, 1971, are estimated at about 1 million standard cases, almost double the very low July 1, 1970 inventories of 567,400 cases.

TUNA

Reveiw

Supplies

Supplies of canned tuna increased substantially in 1970. Supplies were estimated at about 505 million pounds (edible weight), 8 percent above the previous year. Both domestic production and imports of raw tuna were up in 1970. Imports of canned tuna declined slightly. Imported tuna (both raw and canned) were 61 percent of total supplies, about the same as in the previous year.

Landings Set Record

U.S. tuna landings were approximately 226,000 tons last year—up 8 percent from 1969 (table 30). Before last year, the previous record was 213,000 tons in 1967.

All of the increase in landings was on the Pacific Coast, which was up 15 percent. Hawaii and Puerto Rico landings declined for the second year in a row but not enough to offset the substantial Pacific Coast increase.

Landings of yellowfin and skipjack tuna were much higher in 1970, while landings of albacore and bluefin dropped. Albacore dropped sharply in 1970—27 percent below the previous year and the second consecutive decline. Albacore landings in 1970 were 17,300 tons—a little more than half the record 30,400 tons landed in 1963.

Bluefin landings dropped for the fourth consecutive year. The bluefin catch of 5,400 tons, was a little more than half that in the previous year and much below the record 21,900 tons of 1963

Skipjack landings in 1970 were 55,800 tons--a 39-percent increase over the previous year. Skipjack, however, was well below the record 98,000 tons of 1967.

Yellowfin tuna landings were the highest ever in 1970. Yellowfin landings were 143,800 tons—up 5 percent from the year before and the third consecutive yearly increase. All of the increase was on the Pacific Coast; landings by U.S. vessels in Puerto Rico were less than in 1969.

Imports Also Establish Record

Imports of frozen raw tuna were 174,000 tons in 1970—up 11 percent from the year before (table 31). All categories of frozen tuna were record high, except loins and discs which have decreased sharply in the past 2 years.

Imports of albacore were 78,000 tons—about 2,000 tons above 1969. Albacore increased for the fourth year in a row. Heavier imports, however, did not compensate for the 6,500-ton drop in domestic albacore landings. Imports of frozen albacore have more than doubled in the past decade, while U.S. landings have no significant trend upward or downward.

The largest increase in imports of frozen tuna was for species other than albacore (mostly gilled and gutted yellowfin and skipjack). Imports of light meat tuna increased for the third consecutive year. At 94,500 tons they were 15,000 tons above the previous year but only fractionally above the previous record of 94,300 tons in 1962.

Imports of canned tuna were 72.3 million pounds in 1970, a slight drop from the record set in the previous year. More than 99 percent of imports of canned tuna were in brine. Imports of canned tuna packed in oil are negligible because this product has a high traiff.

Tuna Pack Up

Total production of canned tuna was 21.7 million standard cases last year—the first time the pack went over 21 million cases (table 33). Production was 8.5 percent above the previous year. The 1.7-million-case gain last year was one of the largest year-to-year increases in the past 10 years.

Almost all of the increase in the tuna pack came from California canneries, which packed 10.7 million cases. For the first time since 1962, more than 10 million cases were packed in

Table 30.-- Tuna landings by region, 1960-70

(round weight)

Region/year	Albacore	Bluefin	Skipjack	Yellowfin	Other 1/	Total 2/
			Thousand tons			
Pacific Coast						
1960	20.1	6.0	23.2	94.7	-	143.9
1961	16.4	10.4	32.7	96.0	-	155.5
1962	23.0	15.6	46.4	62.0	-	147.0
1963	30.4	15.2	48.3	54.8	-	148.7
1964	24.0	11.6	33.0	74.5	-	143.2
1965	18.6	8.0	42.4	79.3	-	148.2
1966	18.5	17.6	25.5	66.3	-	127.9
1967	24.2	6.8	55.6	70.8	-	157.4
1968	27.9	6.5	29.6	76.6	-	140.6
1969	23.8	7.6	23.0	102.2	-	156.6
4/ 1970	17.3	5.2	38.1	115.5	3.7	179.8
Atlantic & Gulf						
1960	-	.7	-	-	3/	.7
1961	-	1.2	-	-	3/	1.2
1962	-	3.5	3/	3/	3/	3.6
1963	-	5.0	2.1	.2	3/	7.4
1964	-	3.2	1.1	.1	.1	4.5
1965	-	2.3	3/	-	.1	2.5
1966	-	1.3	3/	-	3/	1.3
1967	-	2.2	3/	-	3/	2.2
1968	-	.7	.2	.1	-	1.0
1969	-	1.4	-	-	-	1.4
5/ 1970	-					
Hawaii						
1960	3/	.6	3.7	.2	3/	4.5
1961	3/	.5	5.5	.2	3/	6.2
1962	3/	.6	4.7	.2	3/	5.5
1963	3/	.5	4.1	.2	3/	4.8
1964	3/	.4	4.5	.3	3/	5.2
1965	3/	.3	8.1	.2	3/	8.7
1966	3/	.4	4.7	.3	3/	5.3
1967	3/	.3	4.0	.3	3/	4.6
1968	3/	.3	4.7	.2	3/	5.2
1969	3/	.3	3.1	.2	3/	3.6
5/ 1970	3/					
Puerto Rico						
1960	-	-	2.8	7.6	-	10.5
1961	-	-	5.2	10.3	-	15.5
1962	-	.8	10.0	3.5	-	14.4
1963	-	1.2	15.2	2.0	-	18.5
1964	-	2.2	15.2	6.8	-	24.2
1965	-	1.2	21.0	5.1	-	27.3
1966	-	.6	19.0	12.7	-	32.3
1967	-	.7	38.9	9.4	-	48.9
1968	-	-	23.3	30.5	-	53.8
1969	-	-	14.0	34.1	-	48.1
4/ 1970	-	.2	17.7	28.3	-	46.2
Total U.S. & Puerto Rico						
1960	20.1	7.3	29.7	102.4	3/	159.6
1961	16.4	12.1	43.4	106.5	3/	178.4
1962	23.0	20.6	61.2	65.7	3/	170.5
1963	30.4	21.9	69.7	57.3	3/	179.3
1964	24.0	17.4	53.9	81.7	.1	177.1
1965	18.6	11.9	71.5	84.6	.1	186.7
1966	18.5	19.9	49.2	79.3	3/	166.9
1967	24.2	10.0	98.5	80.5	3/	213.1
1968	27.9	7.5	57.8	107.4	3/	200.8
1969	23.8	9.3	40.1	136.5	3/	209.7
4/ 1970	17.3	5.4	55.8	143.8	3.7	226.0

1/ Unidentified included with other.
2/ Does not include American Samoa.
3/ Less than 50 tons.
4/ Preliminary.
5/ Not available.
Note: May not add to total due to rounding.

Table 31.-- U.S. imports of fresh and frozen tuna, 1960-70

(Product weight)

Year	Whole or dressed: Albacore	Whole or dressed: Other	Whole or dressed: Total	Loins & discs	1/ Total
	Thousand tons				
1960	34.9	82.4	117.3	3.4	120.7
1961	36.0	62.6	98.6	4.2	102.7
1962	42.0	94.3	136.2	5.3	141.5
1963	37.7	77.7	115.4	6.1	121.4
1964	62.5	81.4	143.9	7.5	151.4
1965	67.6	69.5	137.1	6.0	143.2
1966	62.9	90.5	153.4	7.6	161.0
1967	63.7	66.8	130.5	4.0	134.5
1968	66.4	90.6	157.0	3.7	160.6
1969	75.8	79.4	155.2	1.1	156.2
1970	78.0	94.5	172.4	1.6	174.0

1/ Figures may not add to total because of rounding. Does not include landings by foreign vessels in American Samoa.

Table 32.-- U.S. imports of canned tuna, 1960-70

(Product weight)

Year	Brine pack: Japan	Brine pack: Other countries	Brine pack: Total	Oil	Grand total 1/
	Million pounds				
1960	42.6	8.5	51.2	0.6	51.8
1961	46.5	11.7	58.2	.4	58.7
1962	47.1	9.2	56.4	.4	56.7
1963	48.3	8.9	57.3	.2	57.5
1964	44.5	9.9	54.4	.2	54.6
1965	40.7	10.0	50.6	.2	51.0
1966	51.5	9.9	61.4	.2	61.6
1967	57.8	7.3	65.1	.2	65.3
1968	59.0	8.0	67.0	.2	67.2
1969	65.4	7.5	72.9	.2	73.1
1970	66.2	5.9	72.1	.2	72.3

1/ Figures may not add to total because of rounding.

California. California's share of the total tuna pack was 49 percent—up from 45 percent the previous year.

Demand

Demand for canned tuna was strong during most of 1970. Per capita supplies (consumption) were 7 percent higher than in the previous year. In spite of heavier supplies, retail prices advanced 12 percent during 1970.

Consumption Up

During the decade of the 1960's, tuna supplies increased at an average annual rate of 3 percent. The 1970 increase of 8 percent was considerably above the long-run rate.

Per capita consumption of tuna is the highest of all fishery products in the United States. At 2.3 to 2.4 pounds in recent years, tuna has accounted for about 21 percent of the total fish and shellfish consumption of 11.1 to 11.3 pounds per capita.

Prices Up Sharply

Tuna prices at all marketing levels have been rising almost constantly for the past 2 years. Prices of albacore have jumped most because in

Table 33.-- U.S. pack of canned tuna, by region, 1960-70

Year	Pacific Coast: California	Pacific Coast: Washington & Oregon	Pacific Coast: Total	Hawaii and American Samoa	Total Pacific	Puerto Rico	1/ Total
	Thousand standard cases 2/						
1960	10,715	1,474	12,189	3/	3/	3/	15,305
1961	10,546	1,262	11,808	3/	3/	3/	15,768
1962	10,511	1,471	11,982	3/	3/	3/	17,018
1963	9,075	1,487	10,562	1,430	11,992	3,807	16,556
1964	9,293	1,503	10,796	1,352	12,148	4,845	17,689
1965	9,012	1,761	10,773	1,885	12,658	4,874	18,099
1966	9,613	1,541	11,154	2,713	13,867	5,896	19,954
1967	9,342	1,509	10,851	2,733	13,854	6,397	19,682
1968	9,043	1,778	10,821	2,358	13,179	6,401	20,012
1969	8,991	1,533	10,524	3,116	13,640	6,334	19,975
4/ 1970	10,669	1,546	12,215	3,293	15,508	6,190	21,698

1/ Atlantic Coast pack figures are included in the total column only for 1960-68. In 1969 and 1970, Atlantic Coast pack is included in Hawaii and American Samoa pack. Figures may not add to total because of rounding.
2/ Various sized cases converted to the equivalent of 48 No. 1/2 cans to the case.
3/ Not available.
4/ Preliminary.

addition to a strong demand, worldwide catches of albacore have leveled off.

After a decline in exvessel prices in 1967, California canners have been faced with sharp price increases the past 3 years (table 34). Last year prices for albacore averaged 22 percent above the previous year; bluefin was up 17 percent; skipjack was up 16 percent; and yellowfin prices rose 13 percent.

Prices paid by California canners for imported raw tuna went up sharply in 1970 (table 35). The average price paid for albacore (f.o.b. Japan) was $664 per ton—36 percent above the previous year. Prices of gilled and gutted yellowfin increased even more than those of albacore. Yellowfin prices averaged $555 per ton—up 44 percent from the previous year. Yellowfin import prices had been relatively stable at $378 to $388 per ton for the 3 years preceding 1970.

The significantly higher prices paid for raw tuna were reflected in rising wholesale and retail prices during 1970 (table 36). Tuna canners apparently cut their margins in 1970 because wholesale prices for canned tuna did not advance so fast as prices for raw material, especially for albacore.

Wholesale prices for brand name tuna (both white and light meat) increased 12 percent in 1970. Prices for private label packs advanced more. Private label white meat tuna jumped 22 percent last year and light meat was up 15 percent.

Wholesale prices of imported canned tuna generally advanced even more than that of domestic production last year. Prices of white meat imported tuna averaged 16 percent above 1969, while those of light meat advanced 19 percent.

Higher prices were also reflected at the retail level where prices advanced each month during 1970. The U.S. average price for a 6-1/2 oz. can of light chunk tuna was 39.4 cents—up 12 percent from the previous year. The price in January 1970 was 37.6 cents per can and advanced to 42.7 cents by the end of the year.

Outlook

Tuna sales were lower in December and probably also in January when there was considerable publicity at the start of the testing program for mercury. Unfortunately, at the end of the testing program, the publicity may not be so great regarding the fact that only a small fraction of the tuna was above the FDA guideline, and that all tuna presently on the market has been cleared by the FDA.

Tuna sales likely will increase in the coming months. It is possible they could be back to their long-run growth rate by mid-year, if not sooner.

Tuna prices likely will advance again in 1971, although probably not so fast as in 1970. Canners will be paying more for their raw tuna than they did in 1970.

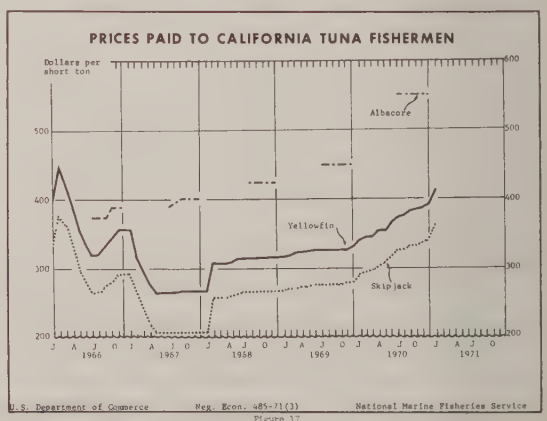


Figure 17

Table 34.-- Exvessel prices for tuna in California, monthly, 1964-70 1/

Species/Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Average
	Dollars per ton												
Albacore													
1964	-	-	-	-	-	-	325	312	312	312	312	312	314
1965	-	-	-	-	-	-	325	325	325	325	325	325	325
1966	-	-	-	-	-	-	375	375	375	390	390	390	382
1967	-	-	-	-	-	-	390	395	400	400	400	400	398
1968	-	-	-	-	-	-	425	425	425	425	425	425	425
1969	-	-	-	-	-	-	450	450	450	450	450	450	450
1970	-	-	-	-	-	-	550	550	550	550	550	550	550
1971	-	-											
Bluefin													
1964	-	-	-	-	250	250	245	240	240	240	240	240	243
1965	-	-	-	-	-	267	267	260	255	255	271	208	255
1966	-	-	-	-	-	295	262	290	290	306	-	-	289
1967	-	280	270	-	-	235	235	235	237	237	237	237	245
1968	237	-	-	-	-	-	295	295	291	295	295	295	286
1969	301	-	-	305	305	306	276	306	306	306	306	-	302
1970	326	-	-	-	347	349	351	358	360	362	373	-	353
1971	-	-											
Skipjack 2/													
1964	209	211	210	208	209	203	203	203	200	200	200	200	205
1965	200	200	200	205	223	227	226	215	205	205	230	276	218
1966	339	374	364	335	298	280	263	266	276	280	294	293	305
1967	293	265	240	217	205	205	205	205	205	205	205	205	221
1968	205	257	257	258	260	263	264	265	266	266	266	266	258
1969	268	270	271	273	274	276	276	276	276	276	279	279	274
1970	291	296	298	301	308	317	323	327	331	333	338	339	317
1971	362	362											
Yellowfin 2/													
1964	255	257	260	259	259	258	258	258	258	258	258	258	258
1965	270	270	270	275	283	287	287	280	275	275	291	326	282
1966	395	447	419	388	353	335	320	321	332	343	358	358	364
1967	358	319	295	277	265	265	265	265	267	267	267	267	281
1968	267	307	308	308	310	314	314	315	316	316	316	316	309
1969	318	319	322	323	325	326	326	326	326	326	329	330	325
1970	341	346	348	355	358	366	372	379	381	383	386	391	367
1971	412	412											

1/ Midpoints of price ranges.
2/ Premium grade.

Table 35.-- Prices paid by California canners for imported raw tuna, monthly, 1964-70 1/

Species/Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Average
	Dollars per ton 2/												
Albacore	(clipper caught, over 20 lbs.)												
1964	355	350	350	348	340	320	323	328	308	303	295	295	326
1965	305	305	313	318	310	310	316	315	330	N.A.	423	430	334
1966	515	530	503	510	510	510	495	463	475	500	500	500	501
1967	500	438	449	405	405	433	480	472	472	467	461	439	452
1968	453	450	452	468	465	459	449	456	451	462	458	461	457
1969	460	458	466	472	483	490	495	506	506	510	-	516	487
1970	531	542	540	611	658	642	683	704	748	762	764	778	664
1971	722												
Yellowfin	(g&g, 20-100 lbs.) 3/												
1964	335	325	330	325	323	323	308	313	303	308	306	N.A.	318
1965	325	313	309	310	310	311	314	315	315	N.A.	413	418	332
1966	480	523	498	485	455	435	435	413	418	450	460	448	458
1967	450	395	414	353	360	402	402	382	388	388	406	N.A.	395
1968	407	395	396	380	372	373	368	368	371	372	370	371	376
1969	370	368	368	374	378	378	399	385	387	391	398	397	383
1970	402	429	461	470	528	574	562	590	632	664	674	679	555
1971	-												

1/ Midpoints of price ranges.
2/ Prices quoted are f.o.b. Japan; prices c.i.f. West Coast about $50 higher.
3/ For equivalent round weight price of gilled and gutted (g&g) yellowfin, divide by factor of 1.11.

Table 36.-- Canned tuna wholesale and retail prices, monthly, 1965-70

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Average
						Dollars per case 1/							
Wholesale 2/- Advertised brands													
White solid (No. 1/2 - 7 oz. 48's)													
1965	15.13	15.13	15.13	15.13	15.13	15.13	15.13	15.13	15.13	15.13	15.13	15.13	15.13
1966	16.00	16.00	17.75	17.75	16.63	16.63	16.63	16.63	16.62	16.67	16.68	16.88	16.74
1967	16.88	16.88	16.88	16.49	16.10	16.10	16.10	16.10	16.10	16.10	16.35	16.35	16.37
1968	16.35	16.34	16.35	16.35	16.60	16.85	16.85	16.85	16.85	16.85	16.85	17.65	16.72
1969	17.85	17.85	17.85	18.05	18.10	18.10	18.41	18.60	18.70	19.10	19.23	19.35	18.43
1970	19.35	19.35	19.55	19.85	19.85	19.95	20.35	20.51	22.35	22.35	22.35	22.35	20.68
1971	22.35	22.35											
Light chunk (No. 1/2 - 6 1/2 oz. 48's)													
1965	13.50	13.50	13.50	13.50	13.50	13.50	13.50	13.50	13.50	13.50	13.50	13.50	13.50
1966	14.25	14.25	15.85	15.85	14.63	14.63	14.40	14.15	14.15	14.15	14.15	14.15	14.55
1967	14.51	14.15	14.15	13.83	13.50	13.50	13.50	13.50	13.50	13.50	13.75	13.56	13.71
1968	13.50	13.50	14.35	14.35	14.35	14.35	14.35	14.35	14.35	14.35	14.35	14.75	14.24
1969	14.85	14.85	14.85	14.85	14.85	14.85	14.91	15.10	15.25	15.85	15.98	16.35	15.19
1970	16.35	16.35	16.49	16.70	16.70	16.80	17.20	17.20	17.20	17.70	17.70	17.70	17.01
1971	18.20	18.70											
Wholesale 2/- Private label													
White solid (No. 1/2 - 7 oz. 48's)													
1965	12.88	12.63	12.75	12.75	12.75	12.75	12.75	12.75	12.50	12.25	12.25	12.25	12.61
1966	12.63	12.63	14.38	14.38	14.38	14.38	14.38	14.38	14.37	14.37	14.37	13.75	14.12
1967	13.75	13.70	13.70	13.50	13.25	13.25	13.25	13.25	13.25	13.25	13.25	13.25	13.39
1968	13.25	13.25	13.85	14.25	14.25	14.25	14.25	14.25	14.25	14.25	14.25	14.25	14.05
1969	14.25	14.25	14.25	14.25	14.25	14.25	14.50	15.25	15.35	15.75	15.75	16.75	14.90
1970	16.75	16.75	16.85	17.00	17.00	17.25	18.25	18.50	19.25	20.25	20.25	20.25	18.20
1971	20.25	20.25											
Light chunk (No. 1/2 - 6 1/2 oz. 48's)													
1965	9.63	9.63	9.50	9.38	9.50	9.63	9.63	9.63	9.63	9.63	9.63	9.63	9.59
1966	10.75	10.25	13.85	13.85	12.75	12.75	12.00	11.75	11.75	11.75	11.94	12.00	12.12
1967	12.00	11.99	11.95	11.65	11.35	11.35	11.35	11.35	11.35	11.35	10.75	10.75	11.43
1968	10.75	10.75	11.75	11.75	11.75	11.75	11.75	11.75	11.75	11.75	11.75	11.75	11.58
1969	11.75	11.75	11.75	11.75	11.75	11.75	11.79	11.88	11.99	12.50	12.50	12.88	12.00
1970	12.88	12.88	12.93	13.00	13.00	13.20	14.00	14.13	14.50	15.00	15.00	15.00	13.79
1971	15.06	15.50											
Imported 3/ (brine pack)													
White solid (No. 1/2 - 7 oz. 48's)													
1965	12.88	12.63	12.75	12.75	12.75	12.75	12.75	12.75	12.50	12.25	12.25	12.25	12.61
1966	12.63	13.63	14.38	14.38	14.38	14.38	14.38	14.38	14.38	14.38	14.38	14.38	14.17
1967	14.38	14.38	14.38	14.38	13.64	12.90	12.90	12.90	12.90	13.40	14.16	14.16	13.71
1968	14.12	13.95	13.95	13.95	13.95	13.95	13.95	13.95	13.95	13.95	13.95	14.56	14.01
1969	14.41	14.41	14.41	14.47	14.51	14.51	14.63	15.00	15.26	15.69	15.72	15.81	14.90
1970	15.81	15.81	16.15	16.18	16.40	17.03	17.82	17.82	18.14	18.52	18.69	19.22	17.30
1971	19.22	19.22	19.22										
Light solid (No. 1/2 - 7 oz. 48's)													
1965	10.00	10.00	10.00	10.25	10.25	10.25	10.25	10.25	10.25	10.25	10.25	10.25	10.19
1966	10.75	10.75	14.00	14.00	14.12	14.12	14.12	14.12	14.12	14.12	14.12	14.12	13.54
1967	14.12	14.12	14.12	14.12	12.26	10.40	10.40	10.40	10.40	10.71	11.18	11.18	11.95
1968	11.15	11.02	11.02	11.02	11.02	11.02	11.02	11.02	11.02	11.02	11.02	11.39	11.06
1969	11.27	11.27	11.27	11.32	11.37	11.37	11.40	11.50	11.78	12.19	12.27	12.51	11.63
1970	12.51	12.51	13.11	13.26	13.73	13.79	14.02	14.02	14.22	14.37	14.58	14.79	13.79
1971	14.79	14.79											
						Cents per can							
Retail 4/													
Light chunk (6 - 6 1/2 oz. cans)													
1965	32.4	32.2	32.0	31.8	31.8	31.9	31.9	32.2	32.2	32.1	31.8	31.9	32.0
1966	32.2	32.9	34.2	34.9	36.2	36.3	36.4	36.4	36.3	35.7	35.8	36.1	35.3
1967	35.9	35.5	35.5	35.3	35.2	35.1	34.6	34.3	34.2	34.4	34.4	34.4	34.9
1968	34.3	34.2	33.7	33.8	34.5	34.7	34.6	34.9	34.9	34.9	34.8	35.0	34.5
1969	35.1	35.4	35.1	35.3	35.6	35.5	35.4	35.7	35.8	36.3	36.5	36.9	35.7
1970	37.6	39.8	38.3	38.7	39.2	39.4	39.4	35.7	40.7	41.7	42.2	42.7	39.4
1971	43.3												

1/ Quotes do not include trade or promotional allowances.
2/ Reported by San Diego brokers and cannery representatives, f.o.b. canner's terminal.
3/ Wholesale price at Los Angeles.
4/ U.S. average retail price reported by the Bureau of Labor Statistics.

SARDINES

Review

Supplies

Total supplies of canned sardines in 1970 were 82.9 million pounds, 11 percent below 1969 and 22 percent less than the 1965-69 average. Much lower domestic production and inventories were the main reasons for the decline in supplies.

Landings Down For Third Straight Year

Except for a brief revival in 1966, landings of Maine sea herring have continued to show a long-term decline. Landings were 36.6 million pounds in 1970, a 32-percent drop from 1969. The decline in landings can be attributed primarily to continuing declining abundance of inshore herring stocks. Other contributing factors include the following:

(1) As a result of fluctuation of the resource, both canners and fishermen find they are not able to depend on steady supplies, and resort to other alternatives.

(2) Most fishermen in the domestic herring fishery still rely on weir and stop seines to harvest the resource. The shift to purse seines has been gradual. If the use of purse seines increases, it will allow domestic fishermen access to greater harvests. There are, however, additional problems in purse seining. Among them are the facts that a large proportion of herring caught by purse seines are too large for canning, that many fish are full of feed and have to be kept alive until the feed is eliminated, and that many herring fishermen are not financially able to equip themselves with purse seining gear.

Domestic Pack Continues Sharp Decline

The U.S. pack of Maine sardines dropped to 17.2 million pounds in 1970, 30 percent below 1969. Last year was the first in recent history of the industry that the pack was below 20 million pounds (table 37).

Imports Up Slightly

Imports of canned sardines were 47.1 million pounds in 1970, around 4 percent above 1969, their first increase since 1966. Imports grew steadily until 1966. Several reasons explain the past trend. First, the scarcity of the domestic pack caused canners in Maine to resort to foreign producers for a consistent source. Also, imports from South Africa increased when the California pilchard fishery declined. Finally, a

Table 37.-- Supplies of canned sardines, domestic pack and imports, 1957-70

(Product weight)

Year	U.S. pack 1/	Imports 2/	Total 3/
	Million pounds		
1957	74.3	34.5	108.8
1958	149.2	39.2	188.3
1959	75.0	32.8	107.7
1960	74.5	38.0	112.4
1961	39.5	53.6	90.1
1962	56.4	65.1	121.5
1963	40.5	50.1	90.5
1964	25.7	53.7	79.4
1965	30.0	53.0	83.0
1966	31.2	67.3	98.5
1967	29.3	61.9	91.2
1968	39.8	58.9	98.7
1969	24.4	45.5	69.9
4/ 1970	17.2	47.1	64.3
	Percent of total		
1975	68.3	31.7	100.0
1958	79.2	20.8	100.0
1959	69.6	30.4	100.0
1960	66.2	33.8	100.0
1961	40.5	59.5	100.0
1962	46.4	53.6	100.0
1963	44.7	55.3	100.0
1964	32.4	67.6	100.0
1965	36.2	63.8	100.0
1966	31.7	68.3	100.0
1967	32.1	67.9	100.0
1968	40.3	59.7	100.0
1969	34.9	65.1	100.0
4/ 1970	26.7	73.3	100.0

1/ Includes the pack of Maine and Pacific sardines. Pacific sardine packs from 1967 to 1968 were negligible, and zero in 1969 and 1970.
2/ Includes sea herring.
3/ Figures may not add due to rounding.
4/ Preliminary.

general increase in the wholesale price for sardines attracted the imported product.

Since 1968, the quantity of imports has been more sporadic, possibly because of a combination of factors: (a) a leveling off of U.S. wholesale prices in 1968, and part of 1969, (b) years of variable herring supplies in countries exporting to the United States, (c) changing tastes and prefrences of U.S. consumers as incomes rise, and (d) increased reliance by exporting nations on alternative markets to the United States.

In 1970, about 34.0 million pounds, or 72 percent of canned sardine imports were shipped "in oil." The percentage of imported sardines "not in oil" has declined the past 4 years because of lower shipments of pilchards from South Africa (fig. 18).

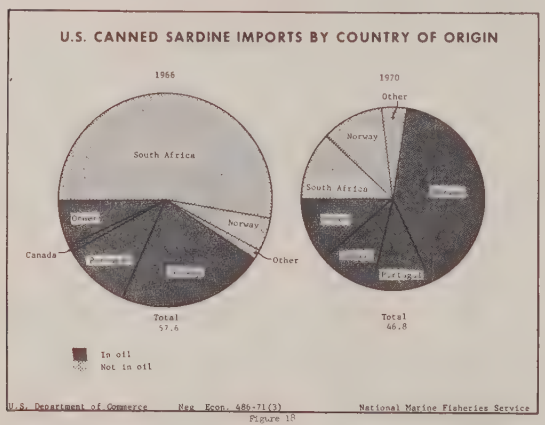


Figure 18

Canada's sardine shipments to the United States are in more direct competition with the domestic producer. Imports of sardines in oil from Canada more than doubled last year—4.0 million pounds compared with 1.9 million pounds in 1969.

Demand

Wholesale and Retail Prices Up

Both wholesale and retail prices of sardines were higher in 1970 than in 1969. Wholesale prices averaged $14.07 per case (100-1/4 lb. cans) about $1.70 over 1969 (table 38). Retail prices averaged only about a half cent a can over 1969, although they have been rising steadily from August 1970.

Consumption Down in Line With Supplies

Apparent consumption of sardines was 71.2 million pounds in 1970, only a 2-percent drop from 1969 (table 39). This decrease was most probably due to lower available supplies rather than rising prices. Around 86 percent of available supplies were consumed in 1970, compared with 78 percent in 1969.

Outlook

Supplies

Prospects are for another low abundance year in the domestic sardine fishery. The pack may once again be below 20 million pounds. If imports increase as slowly as in 1970, total supplies of sardines are expected to be around 85 million pounds, or 2 million pounds above 1970 supplies.

Demand

Consumption May Be Off Slightly

With current prices, consumption of canned sardines may continue to decrease, although perhaps not at the same rate as the past 5 years. Consumption should range between 70 and 74 million pounds for 1971, or within 2 million pounds of 1970.

Table 38.-- Monthly exvessel, wholesale and retail prices of sardines 1966-70

Prices/Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year Average
						Cents per pound 1/							
Exvessel price (Maine)													
1966	2.2	1.6	1.6	1.4	1.7	2.0	1.9	2.3	2.1	2.3	1.6	2.1	1.9
1967	2.4	2.4	2.4	2.3	2.3	2.5	2.5	2.4	2.4	2.3	2.3	2.0	2.4
1968	2.5	1.9	2.5	2.2	2.5	2.2	2.4	2.5	2.5	2.5	2.5	2.4	2.4
1969	2.4	2.5	2.5	2.5	2.5	2.1	1.7	1.4	1.7	1.8	2.1	2.1	2.1
1970	-	2.0	-	-	2.0	1.9	2.0	-	-	1.7	1.4	-	-
1971													
						Dollars per case 2/							
Wholesale price													
1966	10.25	10.25	10.25	10.25	10.25	10.25	10.25	10.25	10.25	11.25	11.25	11.25	10.50
1967	11.25	11.25	11.25	11.25	11.25	11.25	11.25	11.25	12.00	12.25	12.25	12.25	11.56
1968	12.25	12.25	12.25	12.25	12.25	12.25	12.25	12.25	12.25	12.25	12.25	12.25	12.25
1969	12.25	12.25	12.25	12.25	12.25	12.25	12.25	12.25	12.25	12.25	12.63	12.63	12.31
1970	12.63	13.50	13.50	13.50	13.50	13.50	13.50	14.25	15.25	15.25	15.25	15.25	14.07
1971	15.25	15.25											
						Cents per can 3/							
Retail price													
1966	13.9	14.0	14.0	14.1	14.2	14.2	14.2	14.3	14.3	14.3	14.6	14.7	14.2
1967	15.3	15.0	15.1	15.3	15.0	14.9	14.9	14.9	15.0	15.1	15.4	15.5	15.1
1968	15.8	16.0	15.8	15.8	16.0	16.1	16.1	16.1	16.2	16.3	16.3	16.3	16.1
1969	16.3	16.5	16.4	16.5	16.4	16.5	16.5	16.4	16.5	16.6	16.6	16.6	16.5
1970	16.7	16.6	16.6	16.9	17.1	17.3	17.2	16.5	17.8	18.2	18.7	19.0	17.0
1971	19.3												

1/ Round weight.
2/ 100 -1/4-lb. cans per case. New York prices taken on Monday and Tuesday of the week in which the 13th day of the month falls.
3/ U.S. average price per 4-oz. can as reported by the Bureau of Labor Statistics.

Table 39.-- Supplies and utilization of canned sardines, 1960-70

(Product weight)

Year	Supplies				Utilization			
	1/ Production	2/ Beginning stocks	Imports	Total	3/ Ending stocks	Exports	Apparent consumption	
							Total	Per capita
	Million pounds							Pounds
1960	74.5	38.0	25.3	137.8	29.6	21.2	87.0	0.48
1961	36.5	53.6	29.6	119.7	8.0	7.6	104.1	.57
1962	56.1	65.1	8.0	129.2	32.0	7.8	89.4	.48
1963	40.5	50.1	32.0	122.6	31.1	3.7	87.8	.47
1964	25.7	53.7	31.1	110.5	18.3	3.3	88.9	.46
1965	30.0	53.0	18.3	101.3	18.5	3.4	79.4	.41
1966	31.2	67.3	18.5	117.0	13.8	3.6	99.6	.51
1967	29.3	61.9	13.8	105.0	13.2	1.4	90.4	.46
1968	40.5	58.9	13.2	112.6	23.3	3.0	86.3	.43
1969	24.4	45.5	23.3	93.2	18.6	2.1	72.5	.36
4/ 1970	17.2	47.1	18.6	89.2	10.2	1.5	71.2	.35

1/ Includes Maine and Pacific packs for years before 1967. Pacific pack was negligible in 1967 and 1968 and zero in 1969 and 1970.
2/ Includes some canned sea herring.
3/ Canners and distributors stocks of Maine sardines.
4/ Preliminary.

LIST OF TABLES

Table		Page
1	Supplies and utilization of major groundfish fillets, 1960-70	5
2	Supplies and utilization of frozen fish blocks, 1960-70	8
3	Imports of fish blocks and slabs by species and country of origin, 1968-70	8
4	Supplies and utilization of fish sticks and portions, 1960-70	10
5	Wholesale prices of cod and haddock blocks, sticks and portions, monthly, 1968-71	12
6	Supplies and utilization of fresh and frozen flounders, 1960-70	13
7	Monthly exvessel, wholesale and retail prices of flounders, 1968-71	16
8	Supplies and utilization of fresh and frozen cod, 1960-70	17
9	Monthly exvessel, wholesale, and retail prices of cod, 1968-71	19
10	Supplies and utilization of fresh and frozen haddock, 1960-70	21
11	Monthly exvessel, wholesale, and retail prices of haddock in the United States, 1968-71	22
12	Supplies and utilization of Atlantic pollock and cusk, 1960-70	24
13	Monthly exvessel and wholesale prices of pollock and exvessel prices of cusk, 1968-71	24
14	Supplies and utilization of ocean perch, 1960-70.	26
15	Monthly exvessel, wholesale, and retail prices of ocean perch, 1968-71	27
16	Supplies and utilization of Pacific halibut, 1960-70	29
17	Monthly exvessel, wholesale, and retail prices of Pacific halibut, 1968-71	30
18	Whiting--headless and dressed cold storage holdings	32
19	Wholesale prices of whiting July-December 1968-70	32
20	Supplies and utilization of whiting, 1965-70.	33
21	Salmon pack, 1960-70	34
22	Salmon pack by specie, 1965-70	35
23	Percent of salmon pack, by species, 1965-70	35
24	Percentages of total salmon pack by region, 1960-70	35

Table		Page
25	Alaska salmon pack by region and as percentage of total, 1965-70	35
26	Supplies and utilization of canned salmon in the United States, 1965-70	37
27	U.S. monthly wholesale prices of canned salmon and retail prices of salmon steaks, 1968-71	39
28	Total supplies of canned salmon and monthly shipments in percentages by marketing years 1965-66 through 1970-71	39
29	Predicted 1971 Alaskan Salmon pack--comparison with 1970, and 1966-70 average	40
30	Tuna landings by region, 1960-70 (round weight).	42
31	U.S. imports of fresh and frozen tuna, 1960-70	43
32	U.S. imports of canned tuna, 1960-70	43
33	U.S. pack of canned tuna, by region, 1960-70	43
34	Exvessel prices for tuna in California, monthly, 1964-70	45
35	Prices paid by California canners for imported raw tuna, monthly, 1964-70	45
36	Canned tuna wholesale and retail prices, monthly, 1965-70	46
37	Supply of canned sardines--domestic pack and imports, 1957-70	47
38	Monthly exvessel, wholesale and retail prices of sardines 1966-70	49
39	Supplies and utilization of canned sardines, 1960-70	49

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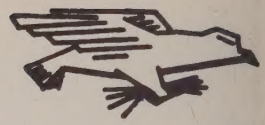

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